

Training & Assessment Strategy

UEE30820 Certificate III in Electrotechnology Electrician

Relates to standards:	1.1 - 1.4 Standards for Registered Training Organisations (RTOs) 2015 – Available here . 2.6, 2.8 ACT Standards Compliance Guide for Australian Apprenticeships – Available here .
Appendices:	Appendix A – UEE30820_Qualification_Outline – Available here . Appendix B – Credit Transfer & Recognition of Prior Learning Policy – Available here .
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1. Overview:

Registered Training Organisation (RTO), Global Energy Training Solutions (GETS), RTO code 41319, has prepared this **Training and Assessment Strategy (TAS)** which aims to provide a transparent and accessible understanding of our operations and responsibilities to our stakeholders.

Learners require flexible, accessible and sufficient learning opportunities to develop performance and knowledge skills prior to assessment activities.

Assessment activities are required to be conducted in a fair and flexible manner while maintaining valid and reliable assessment judgements.

Our role in promoting and ensuring critical safety and operational standards in the electrical industry is acknowledged and taken with the greatest level of responsibility.

2. Training Product:

Training products to which the strategy relates:

This training and assessment strategy relates to;

- all training and assessment services offered.
- the electrical qualification (UEE30820) core and elective units.
- stand-alone units offered to participants not enrolled in the electrical qualification (UEE30820).

Codes and titles:

UEE30820 Certificate III in Electrotechnology Electrician:

- The qualification
- Core units of competency offered as stand-alone units
- Elective units of competency offered as stand-alone units:
 - UEERE0022 - Solve basic problems in photovoltaic energy apparatus and systems
 - UEERE0016 - Install, configure and commission LV grid-connected photovoltaic power systems
 - UEEEL0013 - Install, set up and commission interval metering
 - UEEDV0005 - Install and maintain cabling for multiple access to telecommunication services
 - UEEDV0008 - Install, modify and verify coaxial and structured communication copper cabling
 - UEEIC0013 - Develop, enter and verify discrete control programs for programmable controllers

Additional registration units:

- UEERE0011 - Design grid-connected photovoltaic power supply systems
- UEERE4001 - Install, maintain and fault find battery storage systems for grid-connected photovoltaic systems
- UEERE0011 - Design grid-connected photovoltaic power supply systems
- UEEDV0006 - Install and modify optical fibre performance data communication cabling

For full learner cohort information see Section 4. Target group and Section 7. Duration and Scheduling

3. Core and Elective components:

Core unit codes, titles and our abbreviated names:

1st year

Orientation:

- UEECO0023 - Participate in electrical work and competency development activities

WH&S:

- UEECD0007 - Apply work health and safety regulations, codes and practices in the workplace

CPR:

- HLTAID001 - Provide cardiopulmonary resuscitation

Live Rescue:

- UETTDRRF06 - Perform rescue from a live LV panel

Workshop:

- UEECD0019 - Fabricate, assemble and dismantle utilities industry components

Fixings:

- UEECD0020 - Fix and secure electrotechnology equipment

Drawings:

- UEECD0051 - Use drawings, diagrams, schedules, standards, codes and specifications

Series DC:

- UEECD0046 - Solve problems in single path circuits

Parallel DC:

- UEECD0044 - Solve problems in multiple path circuits

Cables:

- UEEEL0023 - Terminate cables, cords and accessories for low voltage circuits

Magnetism:

- UEEEL0021 - Solve problems in magnetic and electromagnetic devices

DC Machines:

- UEEEL0019 - Solve problems in direct current (d.c.) machines

2nd year

AC Theory:

- UEEEL0020 - Solve problems in low voltage a.c. circuits

Transformers:

- UEEEL0025 - Test and connect transformers

AC Machines:

- UEEEL0024 - Test and connect alternating

Lighting:

- UEEEL0009 - Evaluate and modify low voltage lighting circuits, equipment and controls

Risk Assessment:

- UEECD0016 - Document and apply measures to control WHS risks associated with electrotechnology work

current (a.c.) rotating machines

Environmental:

- UEERE0001 - Apply environmentally and sustainable procedures in the energy sector

Power:

- UEEEL0010 - Evaluate and modify low voltage socket outlets circuits

Heating:

- UEEEL0008 - Evaluate and modify low voltage heating equipment and controls

Protection Methods:

- UEEEL0003 - Arrange circuits, control and protection for electrical installations

Alternative Supplies:

- UEEEL0047 - Identify, shut down and restart systems with alternate supplies

Testing:

- UEEEL0014 - Isolate, test and troubleshoot low voltage electrical circuits

3rd year

Cable Selection:

- UEEEL0018 - Select wiring systems and select cables for low voltage electrical installations

Control Circuits:

- UEEEL0005 - Develop and connect electrical control circuits

Equipment Install:

- UEEEL0012 - Install low voltage wiring, appliances, switchgear and associated accessories

4th year

Capstone:

- UEEEL0039 - Design, install and verify compliance and functionality of general electrical installations

Elective units offered, unit codes, titles and our abbreviated names:

Solar Basics:

- UEERE0022 - Solve basic problems in photovoltaic energy apparatus and systems

Solar Install:

- UEERE0016 - Install, configure and commission LV grid-connected photovoltaic power systems

Solar Design:

- UEERE0011 - Design grid-connected photovoltaic power supply systems

Interval Metering:

- UEEEL0013 - Install, set up and commission interval metering

ACMA:

- UEEDV0005 - Install and maintain cabling for multiple access to telecommunication services

Structured and Coax:

- UEEDV0008 - Install, modify and verify coaxial and structured communication copper cabling

PLCs:

- UEEIC0013 - Develop, enter and verify discrete control programs for programmable controllers

Stand-alone units offered, unit codes, titles and our abbreviated names:

Battery Install:

- UEERE4001 - Install, maintain and fault find battery storage systems for grid-connected photovoltaic systems

Battery Design:

- UEERE5001 - Design battery storage systems for grid-connected photovoltaic systems

Fibre:

- UEEDV0006 - Install and modify optical fibre performance data communication cabling

Core units of competency prerequisite and co-requisite units:

Unit of competency	Prerequisites		Co-requisite units
Orientation: UEECO0023 - Participate in electrical work and competency development activities	Nil		Nil
WH&S: UEECD0007 - Apply work health and safety regulations, codes and practices in the workplace	Nil		Nil
CPR: HLTAID001 - Provide cardiopulmonary resuscitation	Nil		Nil
Live Rescue: UETTDRRF06 - Perform rescue from a live LV panel	CPR - HLTAID001		Nil
Workshop: UEECD0019 - Fabricate, assemble and dismantle utilities industry components	WH&S - UEECD0007		Nil
Fixings: UEECD0020 - Fix and secure electrotechnology equipment	WH&S - UEECD0007		Nil
Drawings: UEECD0051 - Use drawings, diagrams, schedules, standards, codes and specifications	WH&S - UEECD0007		Nil
Series DC: UEECD0046 - Solve problems in single path circuits	WH&S - UEECD0007		Nil
Parallel DC: UEECD0044 - Solve problems in multiple path circuits	WH&S - UEECD0007 Series DC - UEECD0046		Nil
Cables: UEEEL0023 - Terminate cables, cords and accessories for low voltage circuits	WH&S - UEECD0007 Workshop - UEECD0019 Fixings - UEECD0020	Drawings - UEECD0051 Series DC - UEECD0046 Parallel DC - UEECD0044	Nil
Magnetism: UEEEL0021 - Solve problems in magnetic and electromagnetic devices	WH&S - UEECD0007 Series DC - UEECD0046 Parallel DC - UEECD0044		Nil
DC Machines: UEEEL0019 - Solve problems in direct current (d.c.) machines	Series DC - UEECD0046 Parallel DC - UEECD0044 Magnetism - UEEEL0021		Nil
AC Theory: UEEEL0020 - Solve problems in low voltage a.c. circuits	WH&S - UEECD0007 Series DC - UEECD0046 Parallel DC - UEECD0044	Magnetism - UEEEL0021	Nil
Transformers: UEEEL0025 - Test and connect transformers	WH&S - UEECD0007 Workshop - UEECD0019 Fixings - UEECD0020 Drawings - UEECD0051 Series DC - UEECD0046	Parallel DC - UEECD0044 Cables - UEEEL0023 Magnetism - UEEEL0021 DC Machines - UEEEL0019 AC Theory - UEEEL0020	Nil
AC Machines: UEEEL0024 - Test and connect alternating	WH&S - UEECD0007 Workshop - UEECD0019	Parallel DC - UEECD0044 Cables - UEEEL0023	Nil

Unit of competency	Prerequisites		Co-requisite units
current (a.c.) rotating machines	Fixings - UEECD0020 Drawings - UEECD0051 Series DC - UEECD0046	Magnetism - UEEEL0021 DC Machines - UEEEL0019 AC Theory - UEEEL0020	
Environmental: UEERE0001 - Apply environmentally and sustainable procedures in the energy sector	Nil		Nil
Power: UEEEL0010 - Evaluate and modify low voltage socket outlets circuits	WH&S - UEECD0007 Workshop - UEECD0019 Fixings - UEECD0020 Drawings - UEECD0051 Series DC - UEECD0046	Parallel DC - UEECD0044 Cables - UEEEL0023 Magnetism - UEEEL0021 DC Machines - UEEEL0019 AC Theory - UEEEL0020	Nil
Heating: UEEEL0008 - Evaluate and modify low voltage heating equipment and controls	WH&S - UEECD0007 Workshop - UEECD0019 Fixings - UEECD0020 Drawings - UEECD0051 Series DC - UEECD0046	Parallel DC - UEECD0044 Cables - UEEEL0023 Magnetism - UEEEL0021 DC Machines - UEEEL0019 AC Theory - UEEEL0020	Nil
Lighting: UEEEL0009 - Evaluate and modify low voltage lighting circuits, equipment and controls	WH&S - UEECD0007 Workshop - UEECD0019 Fixings - UEECD0020 Drawings - UEECD0051 Series DC - UEECD0046	Parallel DC - UEECD0044 Cables - UEEEL0023 Magnetism - UEEEL0021 DC Machines - UEEEL0019 AC Theory - UEEEL0020	Nil
Risk Assessment: UEECD0016 - Document and apply measures to control WHS risks associated with electrotechnology work	WH&S - UEECD0007		Nil
Protection Methods: UEEEL0003 - Arrange circuits, control and protection for electrical installations	WH&S - UEECD0007 Workshop - UEECD0019 Fixings - UEECD0020 Drawings - UEECD0051 Series DC - UEECD0046	Parallel DC - UEECD0044 Cables - UEEEL0023 Magnetism - UEEEL0021 DC Machines - UEEEL0019 AC Theory - UEEEL0020	Nil
Alternative Supplies: UEEEL0047 - Identify, shut down and restart systems with alternate supplies	WH&S - UEECD0007 Workshop - UEECD0019 Fixings - UEECD0020 Drawings - UEECD0051 Series DC - UEECD0046 Parallel DC - UEECD0044	Cables - UEEEL0023 Magnetism - UEEEL0021 DC Machines - UEEEL0019 AC Theory - UEEEL0020 Protection Methods - UEEEL0003	Nil
Testing: UEEEL0014 - Isolate, test and troubleshoot low voltage electrical circuits	WH&S - UEECD0007 Workshop - UEECD0019 Fixings - UEECD0020 Drawings - UEECD0051 Series DC - UEECD0046 Parallel DC - UEECD0044 Cables - UEEEL0023 Magnetism - UEEEL0021	DC Machines - UEEEL0019 AC Theory - UEEEL0020 Transformers - UEEEL0025 AC Machines - UEEEL0024 Protection Methods - UEEEL0003 Alternative supplies - UEEEL0047	Nil
Cable Selection: UEEEL0018 - Select wiring systems and select cables for low voltage electrical installations	WH&S - UEECD0007 Workshop - UEECD0019 Fixings - UEECD0020 Drawings - UEECD0051 Series DC - UEECD0046 Parallel DC - UEECD0044 Cables - UEEEL0023	AC Theory - UEEEL0020 Transformers - UEEEL0025 AC Machines - UEEEL0024 Power - UEEEL0010 Heating - UEEEL0008 Lighting - UEEEL0009 Protection Methods -	Nil

Unit of competency	Prerequisites		Co-requisite units
	Magnetism - UEEEL0021 DC Machines - UEEEL0019	UEEEL0003	
Control Circuits: UEEEL0005 - Develop and connect electrical control circuits	WH&S - UEECD0007 Workshop - UEECD0019 Fixings - UEECD0020 Drawings - UEECD0051 Series DC - UEECD0046 Parallel DC - UEECD0044 Cables - UEEEL0023	Magnetism - UEEEL0021 DC Machines - UEEEL0019 AC Theory - UEEEL0020 Transformers - UEEEL0025 AC Machines - UEEEL0024 Protection Methods - UEEEL0003	Nil
Equipment Install: UEEEL0012 - Install low voltage wiring, appliances, switchgear and associated accessories	WH&S - UEECD0007 Workshop - UEECD0019 Fixings - UEECD0020 Drawings - UEECD0051 Series DC - UEECD0046 Parallel DC - UEECD0044 Cables - UEEEL0023 Magnetism - UEEEL0021 DC Machines - UEEEL0019 AC Theory - UEEEL0020 Transformers - UEEEL0025 AC Machines - UEEEL0024	Power - UEEEL0010 Heating - UEEEL0008 Lighting - UEEEL0009 Risk Assessment - UEECD0016 Protection Methods - UEEEL0003 Testing - UEEEL0014 Cable Selection - UEEEL0018 Control Circuits - UEEEL0005	Nil
Capstone: UEEEL0039 - Design, install and verify compliance and functionality of general electrical installations	WH&S - UEECD0007 CPR - HLTAID001 Live Rescue - UETDTRRF06 Workshop - UEECD0019 Fixings - UEECD0020 Drawings - UEECD0051 Series DC - UEECD0046 Parallel DC - UEECD0044 Magnetism - UEEEL0021 AC Theory - UEEEL0020 Transformers - UEEEL0025 AC Machines - UEEEL0024 Power - UEEEL0010 Heating - UEEEL0008	Lighting - UEEEL0009 Risk Assessment - UEECD0016 Protection Methods - UEEEL0003 Alternative Supplies - UEEEL0047 Testing - UEEEL0014 Cable Selection - UEEEL0018 Control Circuits - UEEEL0005 Equipment Install - UEEEL0012	Nil

Prerequisites for those holding an 'Unrestricted Electrician's Licence':

"Those holding an 'Unrestricted Electrician's Licence' or equivalent issued in an Australian state or territory meet the requirements of this unit [Capstone - UEEEL0039] and its prerequisite requirements."

Reference: https://training.gov.au/TrainingComponentFiles/UEE/UEEEL0039_R1.pdf

Elective units of competency prerequisite and co-requisite units:

Unit of competency	Prerequisites		Co-requisite units
Solar Basics: UEERE0022 - Solve basic problems in photovoltaic energy apparatus and systems	Series DC - UEECD0046 Parallel DC - UEECD0044 Cables - UEEEL0023	Risk Assessment - UEECD0016	Nil

Unit of competency	Prerequisites	Co-requisite units	
Solar Install: UEERE0016 - Install, configure and commission LV grid-connected photovoltaic power systems	Solar Basics - UEERE0022 Equipment Install - UEEEL0012	Nil	
Solar Design: UEERE0011 - Design grid-connected photovoltaic power supply systems	Solar Basics - UEERE0022	Nil	
Interval Metering: UEEEL0013 - Install, set up and commission interval metering	WH&S - UEECD0007 Workshop - UEECD0019 Fixings - UEECD0020 Drawings - UEECD0051 Series DC - UEECD0046 Parallel DC - UEECD0044 Cables - UEEEL0023 Magnetism - UEEEL0021 DC Machines - UEEEL0019 AC Theory - UEEEL0020 Transformers - UEEEL0025 AC Machines - UEEEL0024 Power - UEEEL0010	Heating - UEEEL0008 Lighting - UEEEL0009 Risk Assessment - UEECD0016 Protection Methods - UEEEL0003 Testing - UEEEL0014 Cable Selection - UEEEL0018 Control Circuits - UEEEL0005 Equipment Install - UEEEL0012	Nil
ACMA: UEEDV0005 - Install and maintain cabling for multiple access to telecommunication services	WH&S - UEECD0007 Workshop - UEECD0019 Fixings - UEECD0020	Drawings - UEECD0051 Series DC - UEECD0046 Parallel DC - UEECD0044	Nil
Structured and Coax: UEEDV0008 - Install, modify and verify coaxial and structured communication copper cabling	WH&S - UEECD0007 Workshop - UEECD0019 Fixings - UEECD0020 Drawings - UEECD0051	Series DC - UEECD0046 Parallel DC - UEECD0044 ACMA - UEEDV0005	Nil
PLCs: UEEIC0013 - Develop, enter and verify discrete control programs for programmable controllers	WH&S - UEECD0007		Nil

Stand-alone units of competency prerequisite and co-requisite units:

Unit of competency	Prerequisites	Co-requisite units	
Batteries Install: UEERE4001 - Install, maintain and fault find battery storage systems for grid-connected photovoltaic systems	Solar Install - UEERE0016	Nil	
Batteries Design: UEERE5001 - Design battery storage systems for grid-connected photovoltaic systems	Solar Design - UEERE0011	Nil	
Fibre: UEEDV0006 - Install and modify optical fibre performance data communication cabling	WH&S - UEECD0007 Workshop - UEECD0019 Fixings - UEECD0020	Drawings - UEECD0051 ACMA - UEEDV0005	Nil

Entry requirements:

For full learner cohort and entry requirement information see:

- Section 7. Duration and Scheduling

Sequencing of delivery and assessment:

See:

- Appendix A – UEE30820_Qualification_Outline

4. Target Group:

Definitions:

Performance Evidence and Knowledge Evidence: Describe what a learner must demonstrate in order to be considered competent.

Industry Reference Committee: A committee convened by the RTO consisting of 3-4 government officials and 3-4 industry representatives. The committee meets 3 to 4 times per year.

Committee functions:

- Assess pending graduates for their eligibility to be trained and assessed in the following unit of competency:
 - Capstone:
 - UEEEL0039 - Design, install and verify compliance and functionality of general electrical installations
- Tentatively approve a reduction in time from a standard four year apprenticeship if eligible.
- Discuss and review changes or updates to our program

UEE30820 qualification enrolments:

Specific needs are identified during the following enrolment activities:

- Enrolment form
- Australian Core Skills Framework assessment
- Induction and Initial Skills assessment

Electrical apprenticeship enrolments:

Require an apprenticeship contract of training issued by the relevant State Training Service, e.g. Skills Canberra or Training Services NSW.

Electrical apprenticeships are commenced through an Australian Apprenticeship Support Network (Apprenticeship Network).

Stand-alone units of competency enrolments:

Specific needs are identified during the following enrolment activities:

- Enrolment form
- Stand-alone units induction

Recognition of Prior Learning (RPL) and Credit Transfer (CT):

For Recognition of Prior Learning/Skills Recognition, see:

- Appendix B – Credit Transfer & Recognition of Prior Learning Policy - Available [here](#).

Qualification enrolment - Standard four year apprenticeship:

Relevant sections, please see above:

- 2. Core and Elective components
- 3. Target Group:
 - UEE30820 qualification enrolments
 - Electrical apprenticeship enrolments
 - Recognition of Prior Learning (RPL) and Credit Transfer (CT)

Qualification enrolment - Australian School-Based Apprenticeship (ASBA):

Relevant sections, please see above:

- 2. Core and Elective components
- 3. Target Group:
 - UEE30820 qualification enrolments
 - Electrical apprenticeship enrolments
 - Recognition of Prior Learning (RPL) and Credit Transfer (CT)

Qualification enrolment - Applying for a reduction in time due to prior trade or experience:

Examples include:

- Second trade
- Overseas electrical experience
- Engineering

A reduction in time off a standard four year apprenticeship may be approved through application to our Industry Reference Committee.

Where evidence of prior learning is demonstrated such as certification documents or work experience, Assessment Only practices may be used for some units of Competency in accordance with:

- Appendix B – Credit Transfer & Recognition of Prior Learning Policy - Available [here](#).

Relevant sections, please see above:

- 2. Core and Elective components
- 3. Target Group:
 - UEE30820 qualification enrolments
 - Electrical apprenticeship enrolments
 - Recognition of Prior Learning (RPL) and Credit Transfer (CT)

Qualification enrolment - Prior off-the-job training and assessment however competency was not achieved:

Four years total inside an electrical apprenticeship contact required.

Where evidence of training and assessment is demonstrated such as an ‘Unofficial transcript’, Assessment Only practices may be used for some units of competency in accordance with:

- Appendix B – Credit Transfer & Recognition of Prior Learning Policy - Available [here](#).

Relevant sections, please see above:

- 2. Core and Elective components
- 3. Target Group:
 - UEE30820 qualification enrolments
 - Electrical apprenticeship enrolments
 - Recognition of Prior Learning (RPL) and Credit Transfer (CT)

Qualification enrolment - Australian Wiring Rules context training for overseas qualified electricians

Where an overseas electrician has been assessed by a Trades Recognition Australia certified RTO and holds an Offshore Technical Skills Record (OTSR) certificate.

Electrical work is only permitted if a Construction Occupations Permit – Unrestricted Electrician has been issued by the local registrar, e.g. Access Canberra.

A one year program may be approved through application to our Industry Reference Committee.

The learner is required to be trained and assessed in the Australian Wiring Rules context training. This includes Performance Evidence and Knowledge Evidence for the following units of competency:

Risk Assessment:

- UEECD0016 - Document and apply measures to control WHS risks associated with electrotechnology work

Protection Methods:

- UEEEL0003 - Arrange circuits, control and protection for electrical installations

Alternative Supplies:

- UEEEL0047 - Identify, shut down and restart systems with alternate supplies

Testing:

- UEEEL0014 - Isolate, test and troubleshoot low voltage electrical circuits

Cable Selection:

- UEEEL0018 - Select wiring systems and select cables for low voltage electrical installations

Equipment Install:

- UEEEL0012 - Install low voltage wiring, appliances, switchgear and associated accessories

Capstone:

- UEEEL0039 - Design, install and verify compliance and functionality of general electrical installations

These units have been selected as they relate to critical safety and operational requirements in the Australian Wiring Rules context.

For all other core units of competency, learners are required to be assessed in all Performance Evidence.

Electives may require being assessed in Performance Evidence and Knowledge Evidence or just Performance Evidence depending on OTSR electives awarded.

Relevant sections, please see above:

- 2. Core and Elective components
- 3. Target Group:
 - UEE30820 qualification enrolments
 - Recognition of Prior Learning (RPL) and Credit Transfer (CT)

Further information: <https://www.tradesrecognitionaustralia.gov.au/programs/electrician-general-and-electrician-special-class>

Qualification enrolment - Upgrade to latest training package:

Learners may enrol in the qualification to upgrade to the latest training package for Verification of Currency purposes. Depending on apprenticeship eligibility this could occur inside or outside of an apprenticeship.

Relevant sections, please see above:

- 2. Core and Elective components
- 3. Target Group:
 - UEE30820 qualification enrolments
 - Electrical apprenticeship enrolments (if applicable)
 - Recognition of Prior Learning (RPL) and Credit Transfer (CT)

Stand-alone unit enrolment - Job seeker, Pre-Apprenticeship:

Pre-Apprenticeships allow job seekers to be trained and assessed in units of competency outside of an apprenticeship in order to learn new non-core electrical skills and potentially improve their job prospects.

The following units of competency may be awarded to successful graduates of a Pre-Apprenticeship. These units represent the first six months of the electrical trade and can be assessed outside of an Apprenticeship using Knowledge Evidence assessments and simulated work place assessments to assess Performance Evidence.

WH&S:

- UEECD0007 - Apply work health and safety regulations, codes and practices in the workplace

CPR:

- HLTAID001 - Provide cardiopulmonary resuscitation

Live Rescue:

- UETTDRRF06 - Perform rescue from a live LV panel

Workshop:

- UEECD0019 - Fabricate, assemble and dismantle utilities industry components

Fixings:

- UEECD0020 - Fix and secure electrotechnology equipment

Drawings:

- UEECD0051 - Use drawings, diagrams, schedules, standards, codes and specifications

Series DC:

- UEECD0046 - Solve problems in single path circuits

Parallel DC:

- UEECD0044 - Solve problems in multiple path circuits

Relevant sections, please see above:

- 2. Core and Elective components
- 3. Target Group:
 - Stand-alone units of competency enrolments
 - Recognition of Prior Learning (RPL) and Credit Transfer (CT)

Stand-alone unit enrolment - Job seeker, Lost employment:

Where an apprentice has lost employment he/she is eligible and encouraged to continue attending off-the-job studies for up to six months while seeking other electrical apprenticeship employment.

The following units of competency may be achieved outside of an electrical apprenticeship: (All other units of competency will require on-site assessments and employer approval)

Orientation:

- UEECO0023 - Participate in electrical work and competency development activities

WH&S:

- UEECD0007 - Apply work health and safety regulations, codes and practices in the workplace

CPR:

- HLTAID001 - Provide cardiopulmonary resuscitation

Live Rescue:

- UETTDRRF06 - Perform rescue from a live LV panel

Workshop:

- UEECD0019 - Fabricate, assemble and dismantle utilities industry components

Fixings:

- UEECD0020 - Fix and secure electrotechnology equipment

Drawings:

- UEECD0051 - Use drawings, diagrams,

Parallel DC:

- UEECD0044 - Solve problems in multiple path circuits

Environmental:

- UEERE0001 - Apply environmentally and sustainable procedures in the energy sector

Risk Assessment:

- UEECD0016 - Document and apply measures to control WHS risks associated with electrotechnology work

Solar Basics:

- UEERE0022 - Solve basic problems in photovoltaic energy apparatus and systems

Solar Design:

- UEERE0011 - Design grid-connected photovoltaic power supply systems

ACMA:

- UEEDV0005 - Install and maintain cabling for multiple access to telecommunication services

Structured and Coax:

schedules, standards, codes and specifications
Series DC:

- UEECD0046 - Solve problems in single path circuits

PLCs:

- UEEDV0008 - Install, modify and verify coaxial and structured communication copper cabling

- UEEIC0013 - Develop, enter and verify discrete control programs for programmable controllers

Relevant sections, please see above:

- 2. Core and Elective components
- 3. Target Group:
 - Stand-alone units of competency enrolments
 - Recognition of Prior Learning (RPL) and Credit Transfer (CT)

Stand-alone unit enrolment - Extra Low Voltage worker:

Extra Low Voltage workers may be trained and assessed in an program that is equivalent to the following section above:

- Stand-alone unit enrolment - Job seeker, Pre-Apprenticeship

Stand-alone unit enrolment - On behalf of the ACT Education Directorate:

Learners in Years 9-12 may be trained and assessed in individual units as part of a Vocational Learning Options program. The units of competency will be selected from the following section above:

- Stand-alone unit enrolment - Job seeker, Pre-Apprenticeship

Stand-alone unit enrolment - Line-worker or Cable Joiner:

Line-workers and Cable Joiners may be trained and assessed in units of competency that are in common with their respective qualifications:

Relevant sections, please see above:

- 2. Core and Elective components
- 3. Target Group:
 - Stand-alone units of competency enrolments
 - Recognition of Prior Learning (RPL) and Credit Transfer (CT)

Stand-alone unit enrolment - Required for training at another Registered Training Organisation:

Learners enrolled in UEE30820 or other qualifications may be trained and assessed in identical units of competency for scheduling or location reasons.

Relevant sections, please see above:

- 2. Core and Elective components
- 3. Target Group:
 - Stand-alone units of competency enrolments
 - Recognition of Prior Learning (RPL) and Credit Transfer (CT)

Stand-alone unit enrolment - Solar and/or Batteries, Installer and/or Designer - Electrical trade pathway:

3rd and 4th year electrical apprentices and qualified electricians may be trained and assessed in Solar and/or Batteries as required for Clean Energy Council, Design and Install accreditation.

Applicable units of competency:

Solar Basics:

- UEERE0022 - Solve basic problems in photovoltaic energy apparatus and systems

Battery Install:

- UEERE4001 - Install, maintain and fault find battery storage systems for grid-connected

- Solar Install: photovoltaic systems
- UEERE0016 - Install, configure and commission LV grid-connected photovoltaic power systems
- Solar Design:
- UEERE0011 - Design grid-connected photovoltaic power supply systems
- Battery Design:
- UEERE5001 - Design battery storage systems for grid-connected photovoltaic systems

Relevant sections, please see above:

- 2. Core and Elective components
- 3. Target Group:
 - Stand-alone units of competency enrolments
 - Recognition of Prior Learning (RPL) and Credit Transfer (CT)

Stand-alone unit enrolment - Solar and/or Batteries, Designer - Engineer pathway:

Engineers may be trained and assessed in Renewable units of competency as required for Clean Energy Council, Design accreditation.

Unless prerequisites can be met, a Statement of Attendance/Statement of Completion will be issued rather than a Statement of Attainment.

A Statement of Attendance/Statement of Completion and an Engineering Degree is required for Clean Energy Council Design accreditation.

Applicable units of competency:

- Solar Basics:
- UEERE0022 - Solve basic problems in photovoltaic energy apparatus and systems
- Solar Design:
- UEERE0011 - Design grid-connected photovoltaic power supply systems
- Battery Design:
- UEERE5001 - Design battery storage systems for grid-connected photovoltaic systems

Relevant sections, please see above:

- 2. Core and Elective components
- 3. Target Group:
 - Stand-alone units of competency enrolments
 - Recognition of Prior Learning (RPL) and Credit Transfer (CT)

Stand-alone unit enrolment - Solar and/or Batteries, Designer - Non-electrical or engineer pathway:

Non-engineers and non-electrical workers may be trained in Renewable units of competency as required for Clean Energy Council, Design accreditation after prerequisite units of competency are met.

Applicable prerequisite units of competency:

- WH&S:
- UEECD0007 - Apply work health and safety regulations, codes and practices in the workplace
- Workshop:
- UEECD0019 - Fabricate, assemble and dismantle utilities industry components
- Fixings:
- UEECD0020 - Fix and secure electrotechnology equipment
- Drawings:
- Series DC:
- UEECD0046 - Solve problems in single path circuits
- Parallel DC:
- UEECD0044 - Solve problems in multiple path circuits
- Cables:
- UEEL0023 - Terminate cables, cords and accessories for low voltage circuits
- Risk Assessment:

- UEECD0051 - Use drawings, diagrams, schedules, standards, codes and specifications
- UEECD0016 - Document and apply measures to control WHS risks associated with electrotechnology work

Applicable units of competency:

Solar Basics:

- UEERE0022 - Solve basic problems in photovoltaic energy apparatus and systems

Solar Design:

- UEERE0011 - Design grid-connected photovoltaic power supply systems

Battery Design:

- UEERE5001 - Design battery storage systems for grid-connected photovoltaic systems

Relevant sections, please see above:

- 2. Core and Elective components
- 3. Target Group:
 - Stand-alone units of competency enrolments
 - Recognition of Prior Learning (RPL) and Credit Transfer (CT)

Stand-alone unit enrolment - Telecommunications - Electrical trade pathway:

1st to 4th year electrical apprentices and qualified electricians may be trained and assessed in Telecommunications units of competency as required for ACMA Registered Cabler accreditation.

Applicable units of competency:

ACMA:

- UEEDV0005 - Install and maintain cabling for multiple access to telecommunication services

Structured and Coax:

- UEEDV0008 - Install, modify and verify coaxial and structured communication copper cabling

Fibre:

- UEEDV0006 - Install and modify optical fibre performance data communication cabling

Relevant sections, please see above:

- 2. Core and Elective components
- 3. Target Group:
 - Stand-alone units of competency enrolments
 - Recognition of Prior Learning (RPL) and Credit Transfer (CT)

Stand-alone unit enrolment - Telecommunications - Telecommunications trade pathway:

Non-electrical workers may be trained in Telecommunications units of competency as required for ACMA Registered Cabler accreditation after prerequisite units of competency are met.

Applicable prerequisite units of competency:

WH&S:

- UEECD0007 - Apply work health and safety regulations, codes and practices in the workplace

Workshop:

- UEECD0019 - Fabricate, assemble and dismantle utilities industry components

Fixings:

- UEECD0020 - Fix and secure electrotechnology equipment

Drawings:

- UEECD0051 - Use drawings, diagrams, schedules, standards, codes and specifications

Series DC:

- UEECD0046 - Solve problems in single path circuits

Parallel DC:

- UEECD0044 - Solve problems in multiple path circuits

Applicable units of competency:

ACMA:

- UEEDV0005 - Install and maintain cabling for multiple access to telecommunication services

Structured and Coax:

- UEEDV0008 - Install, modify and verify coaxial and structured communication copper cabling

Fibre:

- UEEDV0006 - Install and modify optical fibre performance data communication cabling

Relevant sections, please see above:

- 2. Core and Elective components
- 3. Target Group:
 - Stand-alone units of competency enrolments
 - Recognition of Prior Learning (RPL) and Credit Transfer (CT)

Relevant sections, please see above:

- 2. Core and Elective components
- 3. Target Group:
 - Stand-alone units of competency enrolments
 - Recognition of Prior Learning (RPL) and Credit Transfer (CT)

Stand-alone unit enrolment - Interval Metering:

3rd and 4th year electrical apprentices and qualified electricians may be trained and assessed in Interval Metering as required for Access Canberra Construction Occupations licensing endorsements.

Applicable unit of competency:

Interval Metering:

- UEEEL0013 - Install, set up and commission interval metering

Relevant sections, please see above:

- 2. Core and Elective components
- 3. Target Group:
 - Stand-alone units of competency enrolments
 - Recognition of Prior Learning (RPL) and Credit Transfer (CT)

Stand-alone unit enrolment - Programmable Logic Controllers:

1st to 4th year electrical apprentices and qualified electricians may be trained and assessed in PLCs.

Applicable unit of competency:

PLCs

- UEEIC0013 - Develop, enter and verify discrete control programs for programmable controllers

Relevant sections, please see above:

- 2. Core and Elective components
- 3. Target Group:
 - Stand-alone units of competency enrolments
 - Recognition of Prior Learning (RPL) and Credit Transfer (CT)

Stand-alone unit enrolment - Directed by Access Canberra due to public safety concern:

Access Canberra may require an Unrestricted Electrical Work Licence holder to be trained and assessed in specific

units of competence due to a public safety concern including however not limited to:

Testing:

- UEEEL0014 - Isolate, test and troubleshoot low voltage electrical circuits

Capstone:

- UEEEL0039 - Design, install and verify compliance and functionality of general electrical installations

Relevant sections, please see above:

- 2. Core and Elective components
- 3. Target Group:
 - Stand-alone units of competency enrolments
 - Recognition of Prior Learning (RPL) and Credit Transfer (CT)

Stand-alone unit enrolment - Interstate enquiries:

Particular care is taken to avoid training and assessing units of competency for non-electrical workers who are looking to advance their chances of attaining an electrical qualification outside of an electrical apprenticeship or Offshore Technical Skills Record (OTSR) program.

For genuine enrolment enquiries please see relevant qualification and stand-alone sections above.

5. Mode of Delivery:

Mode of delivery:

The RTO provides training and assessment services that are fully off-the-job and face-to-face utilising paper based assessments.

Assessments as they relate to the workplace are required for all units of competency. These are scheduled to be conducted on or off-the-job in accordance with the tables below. Off-the-job assessments are conducted as simulated work place assessments for Performance Evidence only where suitable to do so.

On-line assessments and distance learning is not offered however reasonable adjustments will be made for learners that are unable to attend face-to-face training.

Apprenticeship training is offered one day per week for approximately three years to support on-the-job learning typical of a four year Australian Apprenticeship.

Electives and stand-alone units of competency are offered on Friday nights and Saturdays however some day courses are scheduled from time to time.

At the end of an apprenticeship and pending approval of our Industry Reference Committee learners may sit their final 'Capstone' assessment:

- UEEEL0039 - Design, install and verify compliance and functionality of general electrical installations

The RTO is currently participating in a trial of "MyProfiling", an on-the-job evidence recording tool as requested by Skills Canberra. The trial coexists with our current on and off-the-job training and assessment practices. Use of the Profiling system may reduce the need for learner interview Performance Evidence assessments.

Definitions and examples:

Knowledge Evidence:

- In all cases, trained and assessed off-the-job.

Performance Evidence:

- Trained and assessed on-the-job:

- Core units of competency with the competency field - Electrical
- Orientation - UEECO0023
- Trained and assessed off-the-job:
 - All electives
 - CPR - HLTAID001
- Trained and assessed either on-the-job or off-the-job:
 - Core units of competency with the competency field other than Electrical
 - Off-the-job: When scheduled to attend off-the-job training and assessment
 - On-the-job: For applicants of Recognition of Prior Learning
- Trained and assessed both on-the-job and off-the-job:
 - Capstone - UEEEL0039

Core units of competency Performance Evidence and Knowledge Evidence:

Unit of competency	Competency field	Performance Evidence, trained and assessed	Knowledge Evidence, trained and assessed
Orientation: UEECO0023 - Participate in electrical work and competency development activities	Commercial	On-the-job	Off-the-job
WH&S: UEECD0007 - Apply work health and safety regulations, codes and practices in the workplace	Cross Discipline	On-the-job, or Off-the-job	Off-the-job
CPR: HLTAID001 - Provide cardiopulmonary resuscitation	Nil	Off-the-job	Off-the-job
Live Rescue: UETTDRRF06 - Perform rescue from a live LV panel	Refresher Training	On-the-job, or Off-the-job	Off-the-job
Workshop: UEECD0019 - Fabricate, assemble and dismantle utilities industry components	Cross Discipline	On-the-job, or Off-the-job	Off-the-job
Fixings: UEECD0020 - Fix and secure electrotechnology equipment	Cross Discipline	On-the-job, or Off-the-job	Off-the-job
Drawings: UEECD0051 - Use drawings, diagrams, schedules, standards, codes and specifications	Cross Discipline	On-the-job, or Off-the-job	Off-the-job
Series DC: UEECD0046 - Solve problems in single path circuits	Cross Discipline	On-the-job, or Off-the-job	Off-the-job
Parallel DC: UEECD0044 - Solve problems in multiple path circuits	Cross Discipline	On-the-job, or Off-the-job	Off-the-job
Cables: UEEEL0023 - Terminate cables, cords and accessories for low voltage circuits	Electrical	On-the-job	Off-the-job
Magnetism: UEEEL0021 - Solve problems in magnetic and electromagnetic devices	Electrical	On-the-job	Off-the-job
DC Machines: UEEEL0019 - Solve problems in direct current (d.c.) machines	Electrical	On-the-job	Off-the-job
AC Theory: UEEEL0020 - Solve problems in low voltage a.c. circuits	Electrical	On-the-job	Off-the-job
Transformers:	Electrical	On-the-job	Off-the-job

Unit of competency	Competency field	Performance Evidence, trained and assessed	Knowledge Evidence, trained and assessed
UEEEL0025 - Test and connect transformers			
AC Machines: UEEEL0024 - Test and connect alternating current (a.c.) rotating machines	Electrical	On-the-job	Off-the-job
Environmental: UEERE0001 - Apply environmentally and sustainable procedures in the energy sector	Renewable Energy	On-the-job, or Off-the-job	Off-the-job
Power: UEEEL0010 - Evaluate and modify low voltage socket outlets circuits	Electrical	On-the-job	Off-the-job
Heating: UEEEL0008 - Evaluate and modify low voltage heating equipment and controls	Electrical	On-the-job	Off-the-job
Lighting: UEEEL0009 - Evaluate and modify low voltage lighting circuits, equipment and controls	Electrical	On-the-job	Off-the-job
Risk Assessment: UEECD0016 - Document and apply measures to control WHS risks associated with electrotechnology work	Cross Discipline	On-the-job, or Off-the-job	Off-the-job
Protection Methods: UEEEL0003 - Arrange circuits, control and protection for electrical installations	Electrical	On-the-job	Off-the-job
Alternative Supplies: UEEEL0047 - Identify, shut down and restart systems with alternate supplies	Electrical	On-the-job	Off-the-job
Testing: UEEEL0014 - Isolate, test and troubleshoot low voltage electrical circuits	Electrical	On-the-job	Off-the-job
Cable Selection: UEEEL0018 - Select wiring systems and select cables for low voltage electrical installations	Electrical	On-the-job	Off-the-job
Control Circuits: UEEEL0005 - Develop and connect electrical control circuits	Electrical	On-the-job	Off-the-job
Equipment Install: UEEEL0012 - Install low voltage wiring, appliances, switchgear and associated accessories	Electrical	On-the-job	Off-the-job
Capstone: UEEEL0039 - Design, install and verify compliance and functionality of general electrical installations	Electrical	On-the-job, and Off-the-job	Off-the-job

Elective units of competency Performance Evidence and Knowledge Evidence:

Unit of competency	Competency field	Performance Evidence, trained and assessed	Knowledge Evidence, trained and assessed
Solar Basics:	Renewable	Off-the-job	Off-the-job

Unit of competency	Competency field	Performance Evidence, trained and assessed	Knowledge Evidence, trained and assessed
UEERE0022 - Solve basic problems in photovoltaic energy apparatus and systems	Energy		
Solar Install: UEERE0016 - Install, configure and commission LV grid-connected photovoltaic power systems	Renewable Energy	Off-the-job	Off-the-job
Solar Design: UEERE0011 - Design grid-connected photovoltaic power supply systems	Renewable Energy	Off-the-job	Off-the-job
Interval Metering: UEEEL0013 - Install, set up and commission interval metering	Electrical	Off-the-job	Off-the-job
ACMA: UEEDV0005 - Install and maintain cabling for multiple access to telecommunication services	Data and Voice	Off-the-job	Off-the-job
Structured and Coax: UEEDV0008 - Install, modify and verify coaxial and structured communication copper cabling	Data and Voice	Off-the-job	Off-the-job
PLCs: UEEIC0013 - Develop, enter and verify discrete control programs for programmable controllers	Instrumentation & Control	Off-the-job	Off-the-job

Stand-alone units of competency Performance Evidence and Knowledge Evidence:

Unit of competency	Competency field	Performance Evidence, trained and assessed	Knowledge Evidence, trained and assessed
Batteries Install: UEERE4001 - Install, maintain and fault find battery storage systems for grid-connected photovoltaic systems	Renewable Energy	Off-the-job	Off-the-job
Batteries Design: UEERE5001 - Design battery storage systems for grid-connected photovoltaic systems	Renewable Energy	Off-the-job	Off-the-job
Fibre: UEEDV0006 - Install and modify optical fibre performance data communication cabling	Renewable Energy	Off-the-job	Off-the-job

6. Entry Requirements:

Entry requirements - Qualification:

There are no industry experience, qualifications or prior education levels required for this this qualification.

Language, Literacy and Numeracy will be assessed using our Australian Core Skills Framework (ACSF) assessment. Language, Literacy and Numeracy courses may be recommended prior to commencing the qualification.

Entry requirements - Stand-alone units:

There are no industry experience, qualifications or prior education levels required for stand-alone units.

Prerequisites apply.

Entry requirements - General:

The RTO does not have any physical attribute entry requirements. The Electrotechnology industry is a diverse industry, any learner engaged or looking to be engaged in employment is welcome to be trained and assessed.

Completion requirements - Qualification:

Electrical experience typical of an apprenticeship is required.

See:

- 7. Duration and Scheduling:

Mandatory requirements - To practice electrical work in the workplace:

Only the following types of workers can practice electrical work typical of the UEE30820 Certificate III in Electrotechnology Electrician in the workplace:

- Unrestricted Licence – Electrotechnology Systems
 - Construction Occupation Licence holder – Electrician – Unrestricted
- Unrestricted Permit – Electrotechnology Systems
 - Construction Occupation Licence holder – Electrician – Work permit
 - May work under supervision
- Apprentice Electrician – Under a contract of training
 - Participating in technical studies towards UEE30820 Certificate III in Electrotechnology Electrician
 - May work under supervision

Mandatory requirements - Construction site workers:

To enter onto a construction site in the ACT, workers are required as a minimum to hold:

- White card (CPCCWHS1001 - Prepare to work safely in the construction industry)
- Asbestos awareness (10675NAT - Course in Asbestos Awareness)

Depending on the type of construction work undertaken, other training may be required including however not limited to:

- Height safety training (RIIWHS204E - Work safely at heights) or its successor.
- Confined space training (RIIWHS202E - Enter and work in confined spaces) or its successor.
- Elevated Work Platform training (RIIHAN301E - Operate elevating work platform) or its successor.

The above courses are separate to our training courses, for further information on Construction Occupation Licensing please contact Access Canberra www.accesscanberra.act.gov.au

7. Duration and Scheduling:

Sequencing of delivery and assessment:

See:

- Appendix A – UEE30820_Qualification_Outline

Australian Qualifications Framework (AQF) apprenticeship requirements:

To meet the volume of learning requirements for the qualification, a volume of learning of four years duration through indentured training and employment typical of an Australian Apprenticeship is required.

Where extensive prior work experience and knowledge can be verified and demonstrated, the learning outcomes of

the qualification may be achieved in a shorter period.

Learner cohort:

Learner Type	Program	Enrolment Restrictions	Duration	Qualification Outcome	Eligible to Perform Electrical Work in the Workplace
Australian Apprentice	Apprentice Electrician	Must be under a contract of training, commenced through an Apprenticeship Network Provider	Four years on-the-job experience and part time technical studies (unless the learner has verified Recognition of Prior Learning)	Yes	Under supervision
	Australian School Based Apprentice Electrician (ASBA)			Yes, however requires full time employment after completing the ASBA	
Job seeker	Apprentice Electrician who has lost employment	Eligible to be trained and assessed off-the-job without employment for a maximum of six months	Requires recommencement of apprenticeship and the equivalent of four years on-the-job experience	Yes, however requires recommencement of apprenticeship unless learner is very close to completion	No
	Pre-Apprenticeship course		18-20 days part-time	No, must look for an apprenticeship	
Unrestricted Licence – Electrical	Up-skill to the latest training package	Nil	0.5-1 year part-time	Yes	Yes
Undergoing gap training due to not being eligible for an Unrestricted Licence – Electrical	Overseas Electrician holding an Offshore Technical Skills Record (OTSR) Certificate	Required by Access Canberra to have an Electrical Work Permit – Unrestricted Permit Electrotechnology Systems	Typically 1 year part-time	Yes	Under supervision
	Electrical licence expired more than 5 years prior to renewal application				
	Qualification was issued more than 5 years prior to licence application				
	Similar Trade – Electrical Mechanic/Fitter				
Directed by Access Canberra due to public safety concern	Capstone - UEEEL0039	Nil	8 days part-time	Not generally	As directed by Access Canberra
	Testing - UEEEL0014		3 days part-time		
Stand-alone unit enrolments	Extra Low Voltage worker (3-6 units of competency)	Nil	1 semester part-time	No	No
	On behalf of the ACT Education Directorate: (2-3 units of competency)	Nil	12-18 days part-time	No	

Learner Type	Program	Enrolment Restrictions	Duration	Qualification Outcome	Eligible to Perform Electrical Work in the Workplace
	Line-worker or Cable Joiner (1-7 units of competency)	Enrolled at another RTO	3 semesters part-time studies	No	
	Required for training at another Registered Training Organisation (1-7 units of competency)		1-2 semesters part-time	No	Under supervision
	Solar and/or Batteries, Installer and/or Designer - Electrical trade pathway (2-5 units of competency)	Electrician or 4 th year Electrical Apprentice	4-10 days part-time	No	Electrician, yes. Supervision required for Apprentice
	Solar and/or Batteries, Designer - Engineer pathway (2-4 units of competency)	Engineering certificate	4-10 days part-time	No	No
	Solar and/or Batteries, Designer - Non-electrical or engineer pathway (2-4 units of competency)	8 x prerequisites	1 year part-time	No	No
	Telecommunications - Electrical trade pathway (1-3 units of competency)	Electrician, 1 st to 4 th year electrical apprentice or otherwise meet prerequisites	3-9 days part-time	No	Electrician, yes. Supervision required for Apprentice
	Telecommunications - Telecommunications trade pathway (1-3 units of competency)	6 x prerequisites	1 year part-time	No	No
	Interval Metering (1 unit of competency)	Electrician or 4 th year electrical apprentice	3 days part-time	No	Electrician, yes. Supervision required for Apprentice
	Programmable Logic Controllers (1 unit of competency)	Nil	3 days part-time	No	

Variations due to specific learning needs - Tutorials:

Tutorials are provided free of charge to all industry learners and are suitable for learners who require core skills tutoring, Electrotechnology tutoring, a place to study or a time to catch up on outstanding assessment items.

Learners self-assess whether or not they need to attend tutorials, however the RTO encourages the following types of learners to attend tutorials:

- Learners who may be falling behind for any reason
- Learners who have been identified as requiring additional support through our Australian Core Skills Framework (ACSF) assessments
- Learners that have self identified as requiring additional support through our Initial Skills Assessment

Additional support and learning opportunities including:

- One-on-one tutoring
- Small group training sessions
- Sit or resit assessments
- The opportunity to ask questions related to technical studies
- The opportunity to ask questions related to work activities
- Practical demonstrations
- Practical learning opportunities
- Additional reference materials

Variations due to specific learning needs - Reasonable adjustments:

Reasonable adjustments will be considered and applied where possible for learners experiencing difficulties.

An assessment process or assessment that has been adjusted is assessed at the same academic rigour as the original assessment process or assessment to ensure evidence of competency can be properly satisfied.

Licensed outcome:

Graduates of the qualification may apply to the relevant state authority for an unrestricted Electrical Licence.

- In ACT, Access Canberra – Construction Occupations Licensing
- In NSW, NSW Fair Trading

Training and assessment activity abbreviations:

Tech Day: Technical Day - The day learning activities will occur

Ass. Day: Assessment Day - The day assessment activities will occur

Training and assessment activities - First year Electrical trade - Term/stage 1

Unit of competency	Relates to	Assessment name	Tech Day	Ass. Day
Orientation: UEECO0023 - Participate in electrical work and competency development activities	Performance Evidence	Performance Evidence 1 of 3 – Supervisor	N/A	Site
		Performance Evidence 2 of 3 – Assessor	N/A	Site
		Performance Evidence 3 of 3 – Learner	N/A	Site
	Knowledge Evidence	Knowledge Evidence 1 of 2 - Enrolment and Induction	1 / 2	1 / 2
Knowledge Evidence 2 of 2 - Orientation		2 / 2	2 / 2	
WH&S: UEECD0007 - Apply work health and safety regulations, codes and practices in the workplace	Performance Evidence – When using Simulated Work Place Assessments	Performance Evidence 1 of 2 – Risk Assessment and Safe Isolation	1 / 2	1 / 2
		Performance Evidence 2 of 2 – Safe Isolation	1 / 2	1 / 2
	Performance Evidence – When using Workplace Assessments	Performance Evidence 1 of 3 – Supervisor	N/A	Site
		Performance Evidence 2 of 3 – Assessor	N/A	Site
		Performance Evidence 3 of 3 – Learner	N/A	Site
	Knowledge Evidence	Knowledge Evidence 1 of 2 – SWMS	2 / 2	2 / 2
Knowledge Evidence 2 of 2 – Life Support and Legal		2 / 2	2 / 2	
CPR: HLTAID001 - Provide cardiopulmonary	Performance Evidence	Performance Evidence 1 of 1 – Provide CPR	1 / 1	1 / 1
	Knowledge Evidence	Knowledge Evidence 1 of 1 – Technique and Legal	1 / 1	1 / 1

Unit of competency	Relates to	Assessment name	Tech Day	Ass. Day
resuscitation				
Live Rescue: UETDRRF06 - Perform rescue from a live LV panel	Performance Evidence – When using Simulated Work Place Assessments	Performance Evidence 1 of 1 – Perform live rescue	1 / 1	1 / 1
	Performance Evidence – When using Workplace Assessments	Performance Evidence 1 of 3 – Supervisor	N/A	Site
		Performance Evidence 2 of 3 – Assessor	N/A	Site
		Performance Evidence 3 of 3 – Learner	N/A	Site
Knowledge Evidence	Knowledge Evidence 1 of 1 – Live rescue	1 / 1	1 / 1	
Workshop: UEECD0019 - Fabricate, assemble and dismantle utilities industry components	Performance Evidence – When using Simulated Work Place Assessments	Performance Evidence 1 of 3 – Sheet metal	1 / 5	1 / 5
		Performance Evidence 2 of 3 – Techniques	2 / 5	2 / 5
		Performance Evidence 3 of 3 – Project	3-5/5	5 / 5
	Performance Evidence – When using Workplace Assessments	Performance Evidence 1 of 3 – Supervisor	N/A	Site
		Performance Evidence 2 of 3 – Assessor	N/A	Site
		Performance Evidence 3 of 3 – Learner	N/A	Site
	Knowledge Evidence	Knowledge Evidence 1 of 2 – Engineering Drawing and Marking Out	4 / 5	5 / 5
Knowledge Evidence 2 of 2 – Materials and Tools		4 / 5	5 / 5	

Training and assessment activities - First year Electrical trade - Term/stage 2

Unit of competency	Relates to	Assessment name	Tech Day	Ass. Day
Fixings: UEECD0020 - Fix and secure electrotechnology equipment	Performance Evidence – When using Simulated Work Place Assessments	Performance Evidence 1 of 1 – Install Fixings	1 / 1	1 / 1
	Performance Evidence – When using Workplace Assessments	Performance Evidence 1 of 3 – Supervisor	N/A	Site
		Performance Evidence 2 of 3 – Assessor	N/A	Site
		Performance Evidence 3 of 3 – Learner	N/A	Site
Knowledge Evidence	Knowledge Evidence 1 of 1 - Fixings	1 / 1	1 / 1	
Drawings: UEECD0051 - Use drawings, diagrams, schedules, standards, codes and specifications	Performance Evidence – When using Simulated Work Place Assessments	Performance Evidence 1 of 1 – Drawings	5 / 5	5 / 5
	Performance Evidence – When using Workplace Assessments	Performance Evidence 1 of 3 – Supervisor	N/A	Site
		Performance Evidence 2 of 3 – Assessor	N/A	Site
		Performance Evidence 3 of 3 – Learner	N/A	Site
	Knowledge Evidence	Knowledge Evidence 1 of 3 – Plans	1 / 5	2 / 5
		Knowledge Evidence 2 of 3 – Diagrams	2-3/5	4 / 5
Knowledge Evidence 3 of 3 – Standards and Sequencing		4 / 5	5 / 5	

Training and assessment activities - First year Electrical trade - Term/stage 3

Unit of competency	Relates to	Assessment name	Tech Day	Ass. Day
Series DC: UEECD0046 - Solve problems in single path circuits	Performance Evidence – When using Simulated Work Place Assessments	Performance Evidence 1 of 1 – Series DC	5 / 5	5 / 5
	Performance Evidence – When using Workplace Assessments	Performance Evidence 1 of 3 – Supervisor	N/A	Site
		Performance Evidence 2 of 3 – Assessor	N/A	Site
		Performance Evidence 3 of 3 – Learner	N/A	Site
	Knowledge Evidence	Knowledge Evidence 1 of 3 – Electricity sources and uses	1 / 5	1 / 5
		Knowledge Evidence 2 of 3 – Electrical properties	2-3/5	4 / 5
Knowledge Evidence 3 of 3 – Series Circuits		4 / 5	5 / 5	
Parallel DC: UEECD0044 - Solve problems in multiple path circuits	Performance Evidence – When using Simulated Work Place Assessments	Performance Evidence 1 of 1 – Parallel DC circuits	5 / 5	5 / 5
	Performance Evidence – When using Workplace Assessments	Performance Evidence 1 of 3 – Supervisor	N/A	Site
		Performance Evidence 2 of 3 – Assessor	N/A	Site
		Performance Evidence 3 of 3 – Learner	N/A	Site
	Knowledge Evidence	Knowledge Evidence 1 of 4 – Resistance factors and meters	1 / 5	2 / 5
		Knowledge Evidence 2 of 4 – Parallel Circuits	2 / 5	3 / 5
		Knowledge Evidence 3 of 4 – Series/Parallel Circuits	3 / 5	4 / 5
Knowledge Evidence 4 of 4 – Capacitors		4 / 5	5 / 5	

Training and assessment activities - First year Electrical trade - Term/stage 4

Unit of competency	Relates to	Assessment name	Tech Day	Ass. Day
Cables: UEEEL0023 - Terminate cables, cords and accessories for low voltage circuits	Performance Evidence	Performance Evidence 1 of 3 – Supervisor	N/A	Site
		Performance Evidence 2 of 3 – Assessor	N/A	Site
		Performance Evidence 3 of 3 – Learner	N/A	Site
	Knowledge Evidence	Knowledge Evidence 1 of 3 – Cords and Plugs	1 / 3	1 / 3
		Knowledge Evidence 2 of 3 – Cables and Standards	2 / 3	3 / 3
Knowledge Evidence 3 of 3 – Protection and Terminations		3 / 3	3 / 3	
Magnetism: UEEEL0021 - Solve problems in magnetic and electromagnetic devices	Performance Evidence	Performance Evidence 1 of 3 – Supervisor	N/A	Site
		Performance Evidence 2 of 3 – Assessor	N/A	Site
		Performance Evidence 3 of 3 – Learner	N/A	Site
	Knowledge Evidence	Knowledge Evidence 1 of 2 – Magnetic Circuits	1-2/4	3 / 4
		Knowledge Evidence 1 of 2 – Self and	3-4/4	4 / 4

Unit of competency	Relates to	Assessment name	Tech Day	Ass. Day
		Mutual Induction		
DC Machines: UEEEL0019 - Solve problems in direct current (d.c.) machines	Performance Evidence	Performance Evidence 1 of 3 – Supervisor	N/A	Site
		Performance Evidence 2 of 3 – Assessor	N/A	Site
		Performance Evidence 3 of 3 – Learner	N/A	Site
	Knowledge Evidence	Knowledge Evidence 1 of 2 – Motors	1 / 2	2 / 2
		Knowledge Evidence 1 of 2 – Generators and Efficiency	2 / 2	2 / 2

Training and assessment activities - Second year Electrical trade - Term/stage 1

Unit of competency	Relates to	Assessment name	Tech Day	Ass. Day
AC Theory: UEEEL0020 - Solve problems in low voltage a.c. circuits	Performance Evidence	Performance Evidence 1 of 3 – Supervisor	N/A	Site
		Performance Evidence 2 of 3 – Assessor	N/A	Site
		Performance Evidence 3 of 3 – Learner	N/A	Site
	Knowledge Evidence	Knowledge Evidence 1 of 7 – Pythagoras Theorem, Trigonometry and Sine Waves	1-2 /10	2 / 10
		Knowledge Evidence 2 of 7 – Series and Parallel Resistor Inductor Capacitor (RLC)	3-4 /10	4 / 10
		Knowledge Evidence 3 of 7 – Power Factor	5 /10	6 / 10
		Knowledge Evidence 4 of 7 – Harmonics and Resonance	6 /10	7 / 10
		Knowledge Evidence 5 of 7 – Three Phase Calculations	7-8 /10	9 / 10
		Knowledge Evidence 6 of 7 – Three Phase Concepts	9 /10	10 / 10
		Knowledge Evidence 7 of 7 – Energy Assessment	10 /10	10 / 10

Training and assessment activities - Second year Electrical trade - Term/stage 2

Unit of competency	Relates to	Assessment name	Tech Day	Ass. Day
Transformers: UEEEL0025 - Test and connect transformers	Performance Evidence	Performance Evidence 1 of 3 – Supervisor	N/A	Site
		Performance Evidence 2 of 3 – Assessor	N/A	Site
		Performance Evidence 3 of 3 – Learner	N/A	Site
	Knowledge Evidence	Knowledge Evidence 1 of 2 – Construction and Types	1 / 2	2 / 2
		Knowledge Evidence 1 of 2 – Characteristics	1-2/2	2 / 2
AC Machines: UEEEL0024 - Test and connect alternating current (a.c.) rotating machines	Performance Evidence	Performance Evidence 1 of 3 – Supervisor	N/A	Site
		Performance Evidence 2 of 3 – Assessor	N/A	Site
		Performance Evidence 3 of 3 – Learner	N/A	Site
	Knowledge Evidence	Knowledge Evidence 1 of 4 – Types and	1 / 4	2 / 4

Unit of competency	Relates to	Assessment name	Tech Day	Ass. Day
		Operation		
		Knowledge Evidence 2 of 4 – Motor Protection	2 / 4	3 / 4
		Knowledge Evidence 3 of 4 – Alternators	3 / 4	4 / 4
		Knowledge Evidence 4 of 4 – Service and Faults	4 / 4	4 / 4

Training and assessment activities - Second year Electrical trade - Term/stage 3

Unit of competency	Relates to	Assessment name	Tech Day	Ass. Day
Environmental: UEERE0001 - Apply environmentally and sustainable procedures in the energy sector	Performance Evidence – When using Simulated Work Place Assessments	Performance Evidence 1 of 1 – Energy Audit	2 / 3	3 / 3
		Performance Evidence 1 of 2 – Workplace Environmental Initiatives	3 / 3	3 / 3
	Performance Evidence – When using Workplace Assessments	Performance Evidence 1 of 3 – Supervisor	N/A	Site
		Performance Evidence 2 of 3 – Assessor	N/A	Site
		Performance Evidence 3 of 3 – Learner	N/A	Site
	Knowledge Evidence	Knowledge Evidence 1 of 2 – Climate Change Imperatives	1 / 3	2 / 3
Knowledge Evidence 2 of 2 – Pay-back Periods		2 / 2	3 / 2	
Power: UEEEL0010 - Evaluate and modify low voltage socket outlets circuits	Performance Evidence	Performance Evidence 1 of 3 – Supervisor	N/A	Site
		Performance Evidence 2 of 3 – Assessor	N/A	Site
		Performance Evidence 3 of 3 – Learner	N/A	Site
	Knowledge Evidence	Knowledge Evidence 1 of 2 – Loads into Circuits	1 / 2	2 / 2
		Knowledge Evidence 1 of 2 – Installation and Testing	2 / 2	2 / 2
Heating: UEEEL0008 - Evaluate and modify low voltage heating equipment and controls	Performance Evidence	Performance Evidence 1 of 3 – Supervisor	N/A	Site
		Performance Evidence 2 of 3 – Assessor	N/A	Site
		Performance Evidence 3 of 3 – Learner	N/A	Site
	Knowledge Evidence	Knowledge Evidence 1 of 2 – Heat Transfer	1 / 2	2 / 2
		Knowledge Evidence 2 of 3 – Heating Control	1 / 2	2 / 2
		Knowledge Evidence 3 of 3 – Repair	2 / 2	2 / 2
Lighting: UEEEL0009 - Evaluate and modify low voltage lighting circuits, equipment and controls	Performance Evidence	Performance Evidence 1 of 3 – Supervisor	N/A	Site
		Performance Evidence 2 of 3 – Assessor	N/A	Site
		Performance Evidence 3 of 3 – Learner	N/A	Site
	Knowledge Evidence	Knowledge Evidence 1 of 3 – Luminaries and Smoke Alarms	1 / 2	2 / 2
		Knowledge Evidence 2 of 3 – Control	1 / 2	2 / 2
		Knowledge Evidence 3 of 3 – Switching	2 / 2	2 / 2
Risk Assessment:	Performance Evidence –	Performance Evidence 1 of 1 – Site Safety	1 / 1	1 / 1

Unit of competency	Relates to	Assessment name	Tech Day	Ass. Day
UEECD0016 - Document and apply measures to control WHS risks associated with electrotechnology work	When using Simulated Work Place Assessments	Audit		
	Performance Evidence – When using Workplace Assessments	Performance Evidence 1 of 3 – Supervisor	N/A	Site
		Performance Evidence 2 of 3 – Assessor	N/A	Site
		Performance Evidence 3 of 3 – Learner	N/A	Site
	Knowledge Evidence	Knowledge Evidence 1 of 2 – Electrical Risk Assessment	1 / 1	1 / 1
Knowledge Evidence 2 of 2 – Construction Risk Assessment		1 / 1	1 / 1	

Training and assessment activities - Second year Electrical trade - Term/stage 4

Unit of competency	Relates to	Assessment name	Tech Day	Ass. Day
Protection Methods: UEEEL0003 - Arrange circuits, control and protection for electrical installations	Performance Evidence	Performance Evidence 1 of 3 – Supervisor	N/A	Site
		Performance Evidence 2 of 3 – Assessor	N/A	Site
		Performance Evidence 3 of 3 – Learner	N/A	Site
	Knowledge Evidence	Knowledge Evidence 1 of 6 – Safety Principles	1 / 5	1 / 5
		Knowledge Evidence 2 of 6 – Earthing	2 / 5	2 / 5
		Knowledge Evidence 3 of 6 – Over-current, Earth Fault Loop Impedance (EFLI) and Residual Current Device (RCDs)	3 / 5	3 / 5
		Knowledge Evidence 4 of 6 – Prospective Fault Current	4 / 5	4 / 5
		Knowledge Evidence 5 of 6 – Circuit Arrangement	5 / 5	5 / 5
Alternative Supplies: UEEEL0047 - Identify, shut down and restart systems with alternate supplies	Performance Evidence	Performance Evidence 1 of 3 – Supervisor	N/A	Site
		Performance Evidence 2 of 3 – Assessor	N/A	Site
		Performance Evidence 3 of 3 – Learner	N/A	Site
Knowledge Evidence	Knowledge Evidence 1 of 2 – Solar and Uninterruptible Power Supply (UPS)	1 / 2	2 / 2	
	Knowledge Evidence 2 of 2 – Special Electrical Installations	2 / 2	2 / 2	
Testing: UEEEL0014 - Isolate, test and troubleshoot low voltage electrical circuits	Performance Evidence	Performance Evidence 1 of 3 – Supervisor	N/A	Site
		Performance Evidence 2 of 3 – Assessor	N/A	Site
		Performance Evidence 3 of 3 – Learner	N/A	Site
	Knowledge Evidence	Knowledge Evidence 1 of 4 – Testing Concepts	1 / 3	1 / 3
		Knowledge Evidence 2 of 5 – Visual Inspection and De-energisation	1 / 3	1 / 3
		Knowledge Evidence 3 of 5 – Earthing, IR and Interconnections	2 / 3	2 / 3

Unit of competency	Relates to	Assessment name	Tech Day	Ass. Day
		Knowledge Evidence 4 of 5 – Polarity, EFLI and RCD's	3 / 3	3 / 3
		Knowledge Evidence 5 of 5 – Final test Procedures	3 / 3	3 / 3

Training and assessment activities - Third year Electrical trade - Term/stage 1

Unit of competency	Relates to	Assessment name	Tech Day	Ass. Day
Cable Selection: UEEEL0018 - Select wiring systems and select cables for low voltage electrical installations	Performance Evidence	Performance Evidence 1 of 3 – Supervisor	N/A	Site
		Performance Evidence 2 of 3 – Assessor	N/A	Site
		Performance Evidence 3 of 3 – Learner	N/A	Site
	Knowledge Evidence	Knowledge Evidence 1 of 7 – Maximum Demand and CB selection	1-2/8	3 / 8
		Knowledge Evidence 2 of 7 – Current Carrying Capacity	3-4/8	4 / 8
		Knowledge Evidence 3 of 7 – Voltage Drop and EFLI	5-6/8	7 / 8
		Knowledge Evidence 4 of 7 – Prospective Fault Current (PFC) and Short Circuit Temperature Rise (SCTR)	7 / 8	7 / 8
		Knowledge Evidence 5 of 7 – Switchboards and Metering	7 / 8	7 / 8
		Knowledge Evidence 6 of 7 – Final Sub-Circuits	8 / 8	8 / 8
		Knowledge Evidence 7 of 7 – Design and Safety	8 / 8	8 / 8

Training and assessment activities - Third year Electrical trade - Term/stage 2

Unit of competency	Relates to	Assessment name	Tech Day	Ass. Day
Control Circuits: UEEEL0005 - Develop and connect electrical control circuits	Performance Evidence	Performance Evidence 1 of 3 – Supervisor	N/A	Site
		Performance Evidence 2 of 3 – Assessor	N/A	Site
		Performance Evidence 3 of 3 – Learner	N/A	Site
	Knowledge Evidence	Knowledge Evidence 1 of 7 – Auto/Man/Off 24 hr Clock	1 / 7	1 / 7
		Knowledge Evidence 2 of 7 – Remote Stop Start and EM Stops	2 / 7	2 / 7
		Knowledge Evidence 3 of 7 – Cascading Timers	3 / 7	3 / 7
		Knowledge Evidence 4 of 7 – Fwd/Rev with Jog	4 / 7	4 / 7
		Knowledge Evidence 5 of 7 – Star/Delta Starter	5 / 7	5 / 7
		Knowledge Evidence 6 of 7 – Programmable	6 / 7	6 / 7

Unit of competency	Relates to	Assessment name	Tech Day	Ass. Day
		Logic Controllers (PLCs)		
		Knowledge Evidence 7 of 7 – Motor Control and Variable Speed Drives (VSDs)	7 / 7	7 / 7
Equipment Install: UEEEL0012 - Install low voltage wiring, appliances, switchgear and associated accessories	Performance Evidence	Performance Evidence 1 of 3 – Supervisor	N/A	Site
		Performance Evidence 2 of 3 – Assessor	N/A	Site
		Performance Evidence 3 of 3 – Learner	N/A	Site
	Knowledge Evidence	Knowledge Evidence 1 of 6 – Hazardous and Extra Low Voltage (ELV)	1 / 3	1 / 3
		Knowledge Evidence 2 of 6 – Aerial and Underground	1 / 3	1 / 3
		Knowledge Evidence 3 of 6 – Equipment and Terminations	2 / 3	2 / 3
		Knowledge Evidence 4 of 6 – Building Codes and Heritage	2 / 3	2 / 3
		Knowledge Evidence 5 of 6 – Construction and Demolition	3 / 3	3 / 3
Knowledge Evidence 6 of 6 – AS/NZS 3000 Series	3 / 3	3 / 3		

Training and assessment activities - Third year Electrical trade - Term/stage 3 - Electives

Unit of competency	Relates to	Assessment name	Tech Day	Ass. Day
Solar Basics: UEERE0022 - Solve basic problems in photovoltaic energy apparatus and systems	Performance Evidence	Performance Evidence 1 of 2 – Solar Measurement and WH&S	1 / 2	1 / 2
		Performance Evidence 2 of 2 – Solar Calculations	1 / 2	1 / 2
	Knowledge Evidence	Knowledge Evidence 1 of 2 – Irradiation	1-2/2	2 / 2
		Knowledge Evidence 2 of 2 – PV Modules	1-2/2	2 / 2
Solar Install: UEERE0016 - Install, configure and commission LV grid-connected photovoltaic power systems	Performance Evidence	Performance Evidence 1 of 3 – Roof and Ground Install	1 / 2	1 / 2
		Performance Evidence 2 of 3 – Testing and Fault-finding	1 / 2	1 / 2
		Performance Evidence 3 of 3 – Commissioning	1 / 2	1 / 2
	Knowledge Evidence	Knowledge Evidence 1 of 2 – AS/NZS Requirements	1-2/2	2 / 2
		Knowledge Evidence 2 of 2 – Inverters	1-2/2	2 / 2
Solar Design: UEERE0011 - Design grid-connected photovoltaic power supply systems	Performance Evidence	Performance Evidence 1 of 1 – Design and Team skills	1 / 2	1 / 2
	Knowledge Evidence	Knowledge Evidence 1 of 3 – Design Principles	1 / 2	2 / 2
		Knowledge Evidence 2 of 3 – AS/NZS Requirements	1-2/2	2 / 2
		Knowledge Evidence 3 of 3 – Design	1-2/2	2 / 2

Unit of competency	Relates to	Assessment name	Tech Day	Ass. Day
		Assignment		
Interval Metering: UEEEL0013 - Install, set up and commission interval metering	Performance Evidence	Performance Evidence 1 of 2 – Install	1 / 3	2 / 3
		Performance Evidence 2 of 2 – Testing and Fault-finding	1 / 3	2 / 3
	Knowledge Evidence	Knowledge Evidence 1 of 2 – Meter Layouts	2 / 3	3 / 3
		Knowledge Evidence 2 of 2 – Communication and Standards	2 / 3	3 / 3
ACMA: UEEDV0005 - Install and maintain cabling for multiple access to telecommunication services	Performance Evidence	Performance Evidence 1 of 1 – Installation	2 / 3	3 / 3
	Knowledge Evidence	Knowledge Evidence 1 of 2 – Regulations and Earthing	1 / 3	3 / 3
		Knowledge Evidence 2 of 2 – Cable Systems	1 / 3	3 / 3
Structured and Coax: UEEDV0008 - Install, modify and verify coaxial and structured communication copper cabling	Performance Evidence	Performance Evidence 1 of 2 – Structured Install	2 / 3	3 / 3
		Performance Evidence 2 of 2 – Coax Cable Install	3 / 3	3 / 3
	Knowledge Evidence	Knowledge Evidence 1 of 1 – Cables and Performance	1 / 3	3 / 3
PLCs: UEEIC0013 - Develop, enter and verify discrete control programs for programmable controllers	Performance Evidence	Performance Evidence 1 of 2 – Build and Deploy	3 / 3	3 / 3
		Performance Evidence 2 of 2 – Fault-find	3 / 3	3 / 3
	Knowledge Evidence	Knowledge Evidence 1 of 6 – Terminology and Techniques	1 / 3	3 / 3
		Knowledge Evidence 2 of 6 – Master Control	1 / 3	1 / 3
		Knowledge Evidence 3 of 6 – 24 hr Clock	1 / 3	1 / 3
		Knowledge Evidence 4 of 6 – Cascading Timers	2 / 3	2 / 3
		Knowledge Evidence 5 of 6 – Counters	2 / 3	2 / 3
Knowledge Evidence 6 of 6 – Arduino	2 / 3	2 / 3		

Training and assessment activities - Forth year Electrical trade - Term/stage 4 - Capstone

Unit of competency	Relates to	Assessment name	Tech Day	Ass. Day
Capstone: UEEEL0039 - Design, install and verify compliance and functionality of general electrical installations	Performance Evidence	Performance Evidence 1 of 6 – Supervisor	N/A	Site
		Performance Evidence 2 of 6 – Assessor	N/A	Site
		Performance Evidence 3 of 6 – Learner	N/A	Site
		Performance Evidence 4 of 6 – Risk Assessment and Safe Isolation	5 / 8	8 / 8
		Performance Evidence 5 of 6 – Installation	4 / 8	8 / 8
		Performance Evidence 6 of 6 – Testing and Fault-finding	5 / 8	8 / 8
	Knowledge Evidence	Knowledge Evidence 1 of 9 – Electrical Safety	5 / 8	7 / 8

Unit of competency	Relates to	Assessment name	Tech Day	Ass. Day
		Knowledge Evidence 2 of 9 – Electrical Theory	4 / 8	7 / 8
		Knowledge Evidence 3 of 9 – Fundamental Principles	4 / 8	7 / 8
		Knowledge Evidence 4 of 9 – Installation Planning	1-3/8	7 / 8
		Knowledge Evidence 5 of 9 – Earthing, EFLI and Multiple Earth Neutral (MEN)	1-3/8	7 / 8
		Knowledge Evidence 6 of 9 – Over-current and RCDs	1-3/8	6 / 8
		Knowledge Evidence 7 of 9 – Cable Systems and Terminations	4 / 8	6 / 8
		Knowledge Evidence 8 of 9 – Switchboards and Loads	4 / 8	6 / 8
		Knowledge Evidence 9 of 9 – AS/NZS 3017 and 3012	4 / 8	6 / 8

Training and assessment activities - Stand-alone

Unit of competency	Relates to	Assessment name	Tech Day	Ass. Day
Batteries Install: UEERE4001 - Install, maintain and fault find battery storage systems for grid-connected photovoltaic systems	Performance Evidence	Performance Evidence 1 of 2 – Install	1 / 2	1 / 2
		Performance Evidence 2 of 2 – Testing and Maintenance	1 / 2	1 / 2
	Knowledge Evidence	Knowledge Evidence 1 of 3 – AS/NZS 5139 and Installation	1-2/2	2 / 2
		Knowledge Evidence 2 of 3 – Batteries	1-2/2	2 / 2
		Knowledge Evidence 3 of 3 – Chargers and Inverters	1-2/2	2 / 2
Batteries Design: UEERE5001 - Design battery storage systems for grid-connected photovoltaic systems	Performance Evidence	Performance Evidence 1 of 2 – Design Assignment	1-2/2	2 / 2
	Knowledge Evidence	Knowledge Evidence 1 of 2 – Energy	1 / 2	1 / 2
		Knowledge Evidence 2 of 2 – Batteries	1 / 2	2 / 2
		Knowledge Evidence 3 of 3 – Chargers and Inverters	1 / 2	2 / 2
Fibre: UEEDV0006 - Install and modify optical fibre performance data communication cabling	Performance Evidence	Performance Evidence 1 of 1 – Fibre Install	2 / 3	3 / 3
	Knowledge Evidence	Knowledge Evidence 1 of 2 – Cabling	1 / 3	3 / 3
		Knowledge Evidence 2 of 2 – Fibre Optics	1 / 3	3 / 3

8. Assessment Resources, Methods and Timing:

Assessment methods and timing:

For the break down of units of competency into topics and days that assessments will occur, see:

- 7. Duration and Scheduling:

Work placement hours and how this is structured into the course delivery:

See:

- 5. Mode of Delivery:

Adjustments that may be needed to cater for different student characteristics:

See:

- 7. Duration and Scheduling:
 - Variations due to specific learning needs - Tutorials
 - Variations due to specific learning needs - Reasonable adjustments

Learning and assessment resources - First year Electrical trade - Term/stage 1

Unit of competency	Assessment Name	Learning resources	Assessment resources
Orientation: UEECO0023 - Participate in electrical work and competency development activities	Performance Evidence 1 of 3 – Supervisor	Workplace suitable to practice electrical work	Site-visit
	Performance Evidence 2 of 3 – Assessor		Site-visit
	Performance Evidence 3 of 3 – Learner		Classroom environment
	Knowledge Evidence 1 of 2 – Enrolment and Induction	Guided discussion and enrolment paperwork	Classroom environment
	Knowledge Evidence 2 of 2 – Orientation	Slide set and Enrolment paperwork	Classroom environment
WH&S: UEECD0007 - Apply work health and safety regulations, codes and practices in the workplace	Performance Evidence 1 of 2 – Risk Assessment and Safe Isolation	Slide set Worksheet	Classroom environment
	Performance Evidence 2 of 2 – Safe Isolation	Safe Work Method Statement Demonstration	Workshop environment 24V AC circuit breaker board and lock-out kit
	Performance Evidence 1 of 3 – Supervisor	Workplace suitable to practice electrical work	Site visit
	Performance Evidence 2 of 3 – Assessor		Site visit
	Performance Evidence 3 of 3 – Learner		Classroom environment
	Knowledge Evidence 1 of 2 – SWMS	Slide set Worksheet	Classroom environment
Knowledge Evidence 2 of 2 – Life Support and Legal	Slide set Worksheet	Classroom environment Internet access	
CPR: HLTAID001 - Provide cardiopulmonary resuscitation	Performance Evidence 1 of 1 – Provide CPR	Slide set	Classroom environment adult and infant CPR manikins and defibrillators
	Knowledge Evidence 1 of 1 – Technique and Legal	Slide set Worksheet	Classroom environment
Live Rescue: UETTDRRF06 - Perform rescue from a live LV panel	Performance Evidence 1 of 1 – Perform live rescue	Slide set	Workshop environment live rescue kit
	Performance Evidence 1 of 3 – Supervisor	Workplace suitable to practice electrical work	Site visit
	Performance Evidence 2 of 3 – Assessor		Site visit
	Performance Evidence 3 of 3 – Learner		Classroom environment
Knowledge Evidence 1 of 1 – Live rescue	Slide set	Classroom environment	

Unit of competency	Assessment Name	Learning resources	Assessment resources
		Worksheet	
Workshop: UEECD0019 - Fabricate, assemble and dismantle utilities industry components	Performance Evidence 1 of 3 – Sheet metal	Guided discussion, demonstration and risk assessment	Workshop environment sheet metal bending, rolling and cutting machine Hand and power tools
	Performance Evidence 2 of 3 – Techniques	Guided discussion, demonstration and risk assessment	Workshop environment Welding equipment Soldering equipment Dismantle and assembly equipment Tap and die set
	Performance Evidence 3 of 3 – Project	Guided discussion, demonstration and risk assessment	Workshop environment Suitable projects to work on Hand and power tools
	Performance Evidence 1 of 3 – Supervisor	Workplace suitable to practice electrical work	Site-visit
	Performance Evidence 2 of 3 – Assessor		Site-visit
	Performance Evidence 3 of 3 – Learner		Classroom environment
	Knowledge Evidence 1 of 2 – Engineering Drawing and Marking out	Slide set Worksheet	Workshop environment
	Knowledge Evidence 2 of 2 – Materials and Tools	Slide set Worksheet	Workshop environment

Learning and assessment resources - First year Electrical trade - Term/stage 2

Unit of competency	Assessment name	Learning resources	Assessment resources
Fixings: UEECD0020 - Fix and secure electrotechnology equipment	Performance Evidence 1 of 1 – Install Fixings	Guided discussion, demonstration and risk assessment	Workshop environment Range of solid and hollow wall fixings and other mounting accessories and fixings
	Performance Evidence 1 of 3 – Supervisor	Workplace suitable to practice electrical work	Site visit
	Performance Evidence 2 of 3 – Assessor		Site visit
	Performance Evidence 3 of 3 – Learner		Classroom environment
	Knowledge Evidence 1 of 1 - Fixings	Slide set Worksheet	Workshop environment
Drawings: UEECD0051 - Use drawings, diagrams, schedules, standards, codes and specifications	Performance Evidence 1 of 1 – Drawings	Slide set Worksheet	Classroom environment
	Performance Evidence 1 of 3 – Supervisor	Workplace suitable to practice electrical work	Site visit
	Performance Evidence 2 of 3 – Assessor		Site visit
	Performance Evidence 3 of 3 – Learner		Classroom environment
	Knowledge Evidence 1 of 3 – Plans	Slide set Worksheet	Classroom environment Site plans
	Knowledge Evidence 2 of 3 – Diagrams	Slide set Worksheet	Classroom environment

Unit of competency	Assessment name	Learning resources	Assessment resources
	Knowledge Evidence 3 of 3 – Standards and Sequencing	Slide set Worksheet	Classroom environment AS/NZS 3000 and Internet access

Learning and assessment resources - First year Electrical trade - Term/stage 3

Unit of competency	Assessment name	Learning resources	Assessment resources
Series DC: UEECD0046 - Solve problems in single path circuits	Performance Evidence 1 of 1 – Series DC	Slide set Worksheet	Laboratory environment Equipment and testing equipment
	Performance Evidence 1 of 3 – Supervisor	Workplace suitable to practice electrical work	Site visit
	Performance Evidence 2 of 3 – Assessor		Site visit
	Performance Evidence 3 of 3 – Learner		Classroom environment
	Knowledge Evidence 1 of 3 – Electricity sources and uses	Slide set Worksheet and equipment	Laboratory environment Equipment and Testing equipment
	Knowledge Evidence 2 of 3 – Electrical Properties	Slide set Worksheet and equipment	Laboratory environment Equipment and Testing equipment
	Knowledge Evidence 3 of 3 – Series Circuits	Slide set Worksheet and equipment	Laboratory environment Equipment and Testing equipment
Parallel DC: UEECD0044 - Solve problems in multiple path circuits	Performance Evidence 1 of 1 – Parallel DC	Slide set Worksheet and equipment	Laboratory environment Equipment and Testing equipment
	Performance Evidence 1 of 3 – Supervisor	Workplace suitable to practice electrical work	Site-visit
	Performance Evidence 2 of 3 – Assessor		Site-visit
	Performance Evidence 3 of 3 – Learner		Classroom environment
	Knowledge Evidence 1 of 4 – Resistance Factors and Meters	Slide set Worksheet and equipment	Laboratory environment Equipment and Testing equipment AS/NZS 3000
	Knowledge Evidence 2 of 4 – Parallel Circuits	Slide set Worksheet and equipment	Laboratory environment Equipment and Testing equipment
	Knowledge Evidence 3 of 4 – Series/Parallel Circuits	Slide set Worksheet and equipment	Laboratory environment Equipment and Testing equipment
Knowledge Evidence 4 of 4 – Capacitors	Slide set Worksheet and equipment	Laboratory environment Equipment and Testing equipment	

Learning and assessment resources - First year Electrical trade - Term/stage 4

Unit of competency	Assessment name	Learning resources	Assessment resources
Cables:	Performance Evidence 1 of 3 – Supervisor	Workplace suitable to	Site-visit

Unit of competency	Assessment name	Learning resources	Assessment resources
UEEEL0023 - Terminate cables, cords and accessories for low voltage circuits	Performance Evidence 2 of 3 – Assessor	practice electrical work	Site-visit
	Performance Evidence 3 of 3 – Learner		Classroom environment
	Knowledge Evidence 1 of 3 – Cords and Plugs	Guided discussion, demonstration and risk assessment Slide set	Workshop environment Cords and plugs AS/NZS 3760
	Knowledge Evidence 2 of 3 – Cables and Standards	Guided discussion, Demonstration and risk assessment Slide set	Workshop environment Various cables AS/NZS 3000
	Knowledge Evidence 3 of 3 – Protection and Terminations	Guided discussion, Demonstration and risk assessment Slide set	Workshop environment Switchboard and RCDs Steel conduit and tools
Magnetism: UEEEL0021 - Solve problems in magnetic and electromagnetic devices	Performance Evidence 1 of 3 – Supervisor	Workplace suitable to practice electrical work	Site visit
	Performance Evidence 2 of 3 – Assessor		Site visit
	Performance Evidence 3 of 3 – Learner		Classroom environment
	Knowledge Evidence 1 of 2 – Magnetic Circuits	Slide set Worksheet and equipment	Laboratory environment Equipment and Testing equipment
	Knowledge Evidence 1 of 2 – Self and Mutual Induction	Slide set Worksheet and equipment	Laboratory environment Equipment and Testing equipment
DC Machines: UEEEL0019 - Solve problems in direct current (d.c.) machines	Performance Evidence 1 of 3 – Supervisor	Workplace suitable to practice electrical work	Site visit
	Performance Evidence 2 of 3 – Assessor		Site visit
	Performance Evidence 3 of 3 – Learner		Classroom environment
	Knowledge Evidence 1 of 2 – Motors	Slide set Worksheet and equipment	Laboratory environment Equipment and Testing equipment
	Knowledge Evidence 1 of 2 – Generators and Efficiency	Slide set Worksheet and equipment	Laboratory environment Equipment and Testing equipment

Learning and assessment resources - Second year Electrical trade - Term/stage 1

Unit of competency	Assessment name	Learning resources	Assessment resources
AC Theory: UEEEL0020 - Solve problems in low voltage a.c. circuits	Performance Evidence 1 of 3 – Supervisor	Workplace suitable to practice electrical work	Site visit
	Performance Evidence 2 of 3 – Assessor		Site visit
	Performance Evidence 3 of 3 – Learner		Classroom environment
	Knowledge Evidence 1 of 7 – Pythagoras Theorem, Trigonometry and Sine Waves	Slide set Worksheet	Classroom environment
	Knowledge Evidence 2 of 7 – Series and Parallel RLC	Slide set Worksheet and equipment	Laboratory environment Equipment and Testing equipment
	Knowledge Evidence 3 of 7 – Power Factor	Slide set	Laboratory environment

Unit of competency	Assessment name	Learning resources	Assessment resources
		Worksheet and equipment	Equipment and Testing equipment AS/NZS 3000
	Knowledge Evidence 4 of 7 – Harmonics and Resonance	Slide set Worksheet	Classroom environment
	Knowledge Evidence 5 of 7 – Three-phase calculations	Slide set Worksheet and equipment	Laboratory environment Equipment and Testing equipment
	Knowledge Evidence 6 of 7 – Three-phase concepts	Slide set Worksheet and equipment	Laboratory environment Equipment and Testing equipment AS/NZS 3000
	Knowledge Evidence 7 of 7 – Energy assessment	Slide set Worksheet and equipment	Laboratory environment Equipment and Testing equipment AS/NZS 3000

Learning and assessment resources - Second year Electrical trade - Term/stage 2

Unit of competency	Assessment name	Learning resources	Assessment resources
Transformers: UEEEL0025 - Test and connect transformers	Performance Evidence 1 of 3 – Supervisor	Workplace suitable to practice electrical work	Site visit
	Performance Evidence 2 of 3 – Assessor		Site visit
	Performance Evidence 3 of 3 – Learner		Classroom environment
	Knowledge Evidence 1 of 2 – Construction and Types	Slide set Worksheet and equipment	Laboratory environment Equipment and Testing equipment AS/NZS 3000
	Knowledge Evidence 1 of 2 – Characteristics	Slide set Worksheet and equipment	Laboratory environment Equipment and Testing equipment
AC Machines: UEEEL0024 - Test and connect alternating current (a.c.) rotating machines	Performance Evidence 1 of 3 – Supervisor	Workplace suitable to practice electrical work	Site visit
	Performance Evidence 2 of 3 – Assessor		Site visit
	Performance Evidence 3 of 3 – Learner		Classroom environment
	Knowledge Evidence 1 of 4 – Types and Operation	Slide set Worksheet and equipment	Laboratory environment Equipment and Testing equipment
	Knowledge Evidence 2 of 4 – Motor Protection	Slide set Worksheet and equipment	Laboratory environment Equipment and Testing equipment AS/NZS 3000
	Knowledge Evidence 3 of 4 – Alternators	Slide set Worksheet and equipment	Laboratory environment Equipment and Testing equipment
	Knowledge Evidence 4 of 4 – Service and Faults	Slide set Worksheet and equipment	Laboratory environment Equipment and Testing equipment

Learning and assessment resources - Second year Electrical trade - Term/stage 3

Unit of competency	Assessment name	Learning resources	Assessment resources
Environmental: UEERE0001 - Apply environmentally and sustainable procedures in the energy sector	Performance Evidence 1 of 1 – Energy Audit	Slide set Worksheet	Classroom environment Building to audit
	Performance Evidence 1 of 2 – Workplace Environmental Initiatives	Slide set Worksheet	Classroom environment
	Performance Evidence 1 of 3 – Supervisor	Workplace suitable to practice electrical work	Site visit
	Performance Evidence 2 of 3 – Assessor		Site visit
	Performance Evidence 3 of 3 – Learner		Classroom environment
	Knowledge Evidence 1 of 2 – Climate Change Imperatives	Slide set Worksheet	Classroom environment Internet access
	Knowledge Evidence 2 of 2 – Pay-back Periods	Slide set Worksheet	Classroom environment Scenarios
Power: UEEEL0010 - Evaluate and modify low voltage socket outlets circuits	Performance Evidence 1 of 3 – Supervisor	Workplace suitable to practice electrical work	Site visit
	Performance Evidence 2 of 3 – Assessor		Site visit
	Performance Evidence 3 of 3 – Learner		Classroom environment
	Knowledge Evidence 1 of 2 – Loads into Circuits	Slide set Worksheet	Classroom environment AS/NZS 3000
	Knowledge Evidence 1 of 2 – Install and Testing	Guided discussion and demonstration Slide set	Workshop environment Socket outlets and pendant socket outlets Test equipment AS/NZS 3000
Heating: UEEEL0008 - Evaluate and modify low voltage heating equipment and controls	Performance Evidence 1 of 3 – Supervisor	Workplace suitable to practice electrical work	Site visit
	Performance Evidence 2 of 3 – Assessor		Site visit
	Performance Evidence 3 of 3 – Learner		Classroom environment
	Knowledge Evidence 1 of 2 – Heat Transfer	Slide set Worksheet	Classroom environment
	Knowledge Evidence 2 of 3 – Heating Control	Slide set Worksheet and equipment	Workshop environment Heating and Test equipment AS/NZS 3000
	Knowledge Evidence 3 of 3 – Repair	Slide set Worksheet and equipment	Workshop environment Heating and Test equipment AS/NZS 3000
Lighting: UEEEL0009 - Evaluate and modify low voltage lighting circuits, equipment and controls	Performance Evidence 1 of 3 – Supervisor	Workplace suitable to practice electrical work	Site visit
	Performance Evidence 2 of 3 – Assessor		Site visit
	Performance Evidence 3 of 3 – Learner		Classroom environment
	Knowledge Evidence 1 of 3 – Luminaries and Smoke alarms	Slide set Worksheet and equipment	Workshop environment Lighting and Test equipment AS/NZS 3000
	Knowledge Evidence 2 of 3 – Control	Slide set Worksheet and equipment	Workshop environment Lighting and Test equipment

Unit of competency	Assessment name	Learning resources	Assessment resources
			AS/NZS 3000
	Knowledge Evidence 3 of 3 – Switching	Slide set Worksheet and equipment	Workshop environment Lighting and Test equipment AS/NZS 3000
Risk Assessment: UEECD0016 - Document and apply measures to control WHS risks associated with electrotechnology work	Performance Evidence 1 of 1 – Site Safety Audit	Slide set Worksheet	Workshop environment
	Performance Evidence 1 of 3 – Supervisor	Workplace suitable to Practice electrical work	Site visit
	Performance Evidence 2 of 3 – Assessor		Site visit
	Performance Evidence 3 of 3 – Learner		Classroom environment
	Knowledge Evidence 1 of 2 – Electrical Risk Assessment	Slide set Worksheet	Classroom environment AS/NZS 3000
	Knowledge Evidence 2 of 2 – Construction Risk Assessment	Slide set Worksheet	Classroom environment

Learning and assessment resources - Second year Electrical trade - Term/stage 4

Unit of competency	Assessment name	Learning resources	Assessment resources
Protection Methods: UEEEL0003 - Arrange circuits, control and protection for electrical installations	Performance Evidence 1 of 3 – Supervisor	Workplace suitable to practice electrical work	Site visit
	Performance Evidence 2 of 3 – Assessor		Site visit
	Performance Evidence 3 of 3 – Learner		Classroom environment
	Knowledge Evidence 1 of 6 – Safety Principles	Slide set Worksheet	Classroom environment AS/NZS 3000
	Knowledge Evidence 2 of 6 – Earthing	Slide set Worksheet	Classroom environment AS/NZS 3000
	Knowledge Evidence 3 of 6 – Over-current, EFLI and RCDs	Slide set Worksheet	Classroom environment AS/NZS 3000
	Knowledge Evidence 4 of 6 – Prospective Fault Current	Slide set Worksheet	Classroom environment AS/NZS 3000 AS/NZS 3008
	Knowledge Evidence 5 of 6 – Circuit Arrangement	Slide set Worksheet	Classroom environment AS/NZS 3000
	Knowledge Evidence 6 of 6 – Switchboards	Slide set Worksheet	Classroom environment AS/NZS 3000
Alternative Supplies: UEEEL0047 - Identify, shut down and restart systems with alternate supplies	Performance Evidence 1 of 3 – Supervisor	Workplace suitable to practice electrical work	Site visit
	Performance Evidence 2 of 3 – Assessor		Site visit
	Performance Evidence 3 of 3 – Learner		Classroom environment
	Knowledge Evidence 1 of 2 – Solar and UPS	Slide set Worksheet	Classroom environment AS/NZS 4777 AS/NZ 4836
	Knowledge Evidence 2 of 2 – Special Electrical Installations	Slide set Worksheet	Classroom environment AS/NZS 3000 AS/NZS 4777 (series) AS/NZS 5033 AS/NZS 3010

Unit of competency	Assessment name	Learning resources	Assessment resources
			AS/NZS 4509 AS 3011 AS/NZS 5139
Testing: UEEEL0014 - Isolate, test and troubleshoot low voltage electrical circuits	Performance Evidence 1 of 3 – Supervisor	Workplace suitable to practice electrical work	Site visit
	Performance Evidence 2 of 3 – Assessor		Site visit
	Performance Evidence 3 of 3 – Learner		Classroom environment
	Knowledge Evidence 1 of 4 – Testing Concepts	Slide set Worksheet Testing handouts	Classroom environment AS/NZS 3000 AS/NZS 3760
	Knowledge Evidence 2 of 5 – Visual Inspection and De-energisation	Slide set Worksheet Testing handouts	Workshop and building environment AS/NZS 3000
	Knowledge Evidence 3 of 5 – Earthing, IR and Interconnections	Slide set Worksheet Testing handouts	Classroom environment Testing and fault finding boards AS/NZS 3000
	Knowledge Evidence 4 of 5 – Polarity, EFLI and RCD's	Slide set Worksheet Testing handouts	Classroom environment Testing and fault finding boards AS/NZS 3000
Knowledge Evidence 5 of 5 – Final Test Procedures	Slide set Worksheet Testing handouts	Classroom environment Testing and fault- finding boards AS/NZS 3000	

Learning and assessment resources - Third year Electrical trade - Term/stage 1

Unit of competency	Assessment name	Learning resources	Assessment resources
Cable Selection: UEEEL0018 - Select wiring systems and select cables for low voltage electrical installations	Performance Evidence 1 of 3 – Supervisor	Workplace suitable to practice electrical work	Site visit
	Performance Evidence 2 of 3 – Assessor		Site visit
	Performance Evidence 3 of 3 – Learner		Classroom environment
	Knowledge Evidence 1 of 7 – Maximum Demand and CB selection	Slide set Worksheet	Classroom environment AS/NZS 3000
	Knowledge Evidence 2 of 7 – Current Carrying Capacity	Slide set Worksheet	Classroom environment AS/NZS 3000 AS/NZS 3008
	Knowledge Evidence 3 of 7 – Voltage Drop and EFLI	Slide set Worksheet	Classroom environment AS/NZS 3000 AS/NZS 3008
	Knowledge Evidence 4 of 7 – PFC and SCTR	Slide set Worksheet	Classroom environment AS/NZS 3000 AS/NZS 3008
	Knowledge Evidence 5 of 7 – Switchboards and Metering	Slide set Worksheet	Classroom environment AS/NZS 3000
Knowledge Evidence 6 of 7 – Final Sub- Circuits	Slide set Worksheet	Classroom environment AS/NZS 3000	

Unit of competency	Assessment name	Learning resources	Assessment resources
	Knowledge Evidence 7 of 7 – Design and Safety	Slide set Worksheet	Classroom environment AS/NZS 3000

Learning and assessment resources - Third year Electrical trade - Term/stage 2

Unit of competency	Assessment name	Learning resources	Assessment resources
Control Circuits: UEEEL0005 - Develop and connect electrical control circuits	Performance Evidence 1 of 3 – Supervisor	Workplace suitable to practice electrical work	Site visit
	Performance Evidence 2 of 3 – Assessor		Site visit
	Performance Evidence 3 of 3 – Learner		Classroom environment
	Knowledge Evidence 1 of 7 – Auto/Man/Off 24 hr Clock	Worksheet and practical equipment	Workshop environment Control circuit practical equipment
	Knowledge Evidence 2 of 7 – Remote Stop Start and EM Stops	Worksheet and practical equipment	Workshop environment Control circuit practical equipment
	Knowledge Evidence 3 of 7 – Cascading Timers	Worksheet and practical equipment	Workshop environment Control circuit practical equipment
	Knowledge Evidence 4 of 7 – Fwd/Rev with Jog	Worksheet and practical equipment	Workshop environment Control circuit practical equipment
	Knowledge Evidence 5 of 7 – Star/Delta Starter	Worksheet and practical equipment	Workshop environment Control circuit practical equipment
	Knowledge Evidence 6 of 7 – PLCs	Worksheet and PLC software	Classroom environment PLC software
Knowledge Evidence 7 of 7 – Motor Control and VSDs	Worksheet and practical equipment Slide set	Workshop environment Control circuit practical equipment AS/NZS 3000	
Equipment Install: UEEEL0012 - Install low voltage wiring, appliances, switchgear and associated accessories	Performance Evidence 1 of 3 – Supervisor	Workplace suitable to practice electrical work	Site visit
	Performance Evidence 2 of 3 – Assessor		Site visit
	Performance Evidence 3 of 3 – Learner		Classroom environment
	Knowledge Evidence 1 of 6 – Hazardous and ELV	Slide set	Classroom environment AS/NZS 3000
	Knowledge Evidence 2 of 6 – Aerial and Underground	Slide set	Classroom environment AS/NZS 3000
	Knowledge Evidence 3 of 6 – Equipment and Terminations	Slide set	Classroom environment AS/NZS 3000 Internet Access
	Knowledge Evidence 4 of 6 – Building Codes and Heritage	Slide set	Classroom environment AS/NZS 3000 Building Codes Internet Access
Knowledge Evidence 5 of 6 – Construction and Demolition	Slide set	Classroom environment AS/NZS 3000	

Unit of competency	Assessment name	Learning resources	Assessment resources
			AS/NZS 3012
	Knowledge Evidence 6 of 6 – AS/NZS 3000 Series	Slide set	Classroom environment AS/NZS 3001 AS/NZS 3002 AS/NZS 3003 AS/NZS 3004 AS/NZS 5053

Learning and assessment resources - Third year Electrical trade - Term/stage 3 - Electives

Unit of competency	Assessment name	Learning resources	Assessment resources
Solar Basics: UEERE0022 - Solve basic problems in photovoltaic energy apparatus and systems	Performance Evidence 1 of 2 – Solar Measurement and WH&S	Slide set Worksheet	Laboratory environment
	Performance Evidence 2 of 2 – Solar Calculations	Slide set Worksheet	Classroom environment
	Knowledge Evidence 1 of 2 – Irradiation	Slide set Worksheet	Classroom environment
	Knowledge Evidence 2 of 2 – PV Modules	Slide set Worksheet	Classroom environment
Solar Install: UEERE0016 - Install, configure and commission LV grid-connected photovoltaic power systems	Performance Evidence 1 of 3 – Roof and Ground Install	Slide set Worksheet	Workshop environment Tin, tile and tilt-frame solar installation
	Performance Evidence 2 of 3 – Testing and Fault-finding	Slide set Worksheet	Workshop environment Solar Fault-finding Boards
	Performance Evidence 3 of 3 – Commissioning	Slide set Worksheet	Workshop environment Solar Commissioning Boards
	Knowledge Evidence 1 of 2 – AS/NZS Requirements	Slide set Worksheet	Classroom environment AS/NZS 3000 AS/NZS 5033
	Knowledge Evidence 2 of 2 – Inverters	Slide set Worksheet	Classroom environment AS/NZS 4777.1 AS/NZS 4777.2
Solar Design: UEERE0011 - Design grid-connected photovoltaic power supply systems	Performance Evidence 1 of 1 – Design and Team skills	Slide set Worksheet	Classroom environment Scenarios
	Knowledge Evidence 1 of 3 – Design Principles	Slide set Worksheet	Classroom environment AS/NZS 5033
	Knowledge Evidence 2 of 3 – AS/NZS Requirements	Slide set Worksheet	Classroom environment AS/NZS 5033 AS/NZS 4777.1 AS/NZS 4777.2
	Knowledge Evidence 3 of 3 – Design assignment	Slide set Worksheet	Classroom environment
Interval Metering: UEEEL0013 -	Performance Evidence 1 of 2 – Install	Slide set Worksheet	Classroom environment Switchboards and Meters

Unit of competency	Assessment name	Learning resources	Assessment resources
Install, set up and commission interval metering	Performance Evidence 2 of 2 – Testing and Fault-finding	Slide set Worksheet	Classroom environment Fault-finding boards
	Knowledge Evidence 1 of 2 – Meter Layouts	Slide set Worksheet	Classroom environment
	Knowledge Evidence 2 of 2 – Communication and Standards	Slide set Worksheet	Classroom environment Internet Access
ACMA: UEEDV0005 - Install and maintain cabling for multiple access to telecommunication services	Performance Evidence 1 of 1 – Installation	Slide set Worksheet	Workshop environment Communications cables, termination equipment and testing equipment
	Knowledge Evidence 1 of 2 – Regulations and Earthing	Slide set Worksheet	Classroom environment Internet access
	Knowledge Evidence 2 of 2 – Cable Systems	Slide set Worksheet	Classroom environment Internet access
Structured and Coax: UEEDV0008 - Install, modify and verify coaxial and structured communication copper cabling	Performance Evidence 1 of 2 – Structured Install	Slide set Worksheet	Workshop environment Communications cables, termination equipment and testing equipment
	Performance Evidence 2 of 2 – Coax Install	Slide set Worksheet	Workshop environment Communications cables, termination equipment and testing equipment
	Knowledge Evidence 1 of 1 – Cables and Performance	Slide set Worksheet	Classroom environment Internet Access AS/NZS 11801 (series) AS/NZS 1367
PLCs: UEEIC0013 - Develop, enter and verify discrete control programs for programmable controllers	Performance Evidence 1 of 2 – Build and Deploy	Slide set PLC software	Workshop environment PLC Software, PLC inputs and outputs
	Performance Evidence 2 of 2 – Fault find	Slide set PLC software	Classroom environment PLC Software, PLC, inputs and outputs
	Knowledge Evidence 1 of 6 – Terminology and Techniques	Slide set PLC software	Classroom environment PLC Software, PLC inputs and outputs
	Knowledge Evidence 2 of 6 – Master Control	Slide set PLC software	Classroom environment PLC Software, PLC inputs and outputs
	Knowledge Evidence 3 of 6 – 24 hr O'clock	Slide set PLC software	Classroom environment PLC Software PLC, inputs and outputs
	Knowledge Evidence 4 of 6 – Cascading Timers	Slide set PLC software	Classroom environment PLC Software, PLC inputs and outputs
	Knowledge Evidence 5 of 6 – Counters	Slide set PLC software	Classroom environment PLC Software, PLC inputs and outputs
	Knowledge Evidence 6 of 6 – Arduino	Slide set	Workshop environment

Unit of competency	Assessment name	Learning resources	Assessment resources
		PLC software	PLC Software PLC, inputs and outputs

Learning and assessment resources - Forth year Electrical trade - Term/stage 4 - Capstone

Unit of competency	Assessment name	Learning resources	Assessment resources
Capstone: UEEEL0039 - Design, install and verify compliance and functionality of general electrical installations	Performance Evidence 1 of 6 – Supervisor	Workplace suitable to practice electrical work	Site visit
	Performance Evidence 2 of 6 – Assessor		Site visit
	Performance Evidence 3 of 6 – Learner		Classroom environment
	Performance Evidence 4 of 6 – Risk Assessment and Safe Isolation	Slide set Safe Isolation SWMS	Workshop environment 24V AC circuit breaker board and lock-out kit
	Performance Evidence 5 of 6 – Installation	Slide set Worksheet	Workshop environment Switchboard, protection devices, cable, equipment AS/NZS 3000
	Performance Evidence 6 of 6 – Testing and Fault-finding	Slide set Testing handouts	Workshop environment testing boards AS/NZS 3000
	Knowledge Evidence 1 of 9 – Electrical Safety	Slide set Worksheet	Classroom environment AS/NZS 3000
	Knowledge Evidence 2 of 9 – Electrical Theory	Slide set Worksheet	Classroom environment AS/NZS 3000
	Knowledge Evidence 3 of 9 – Fundamental Principles	Slide set Worksheet	Classroom environment AS/NZS 3000
	Knowledge Evidence 4 of 9 – Installation Planning	Slide set Worksheet	Classroom environment AS/NZS 3000 AS/NZS 3008
	Knowledge Evidence 5 of 9 – Earthing, EFLI and MEN	Slide set Worksheet	Classroom environment AS/NZS 3000
	Knowledge Evidence 6 of 9 – Over-current and RCDs	Slide set Worksheet	Classroom environment AS/NZS 3000 AS/NZS 3008
	Knowledge Evidence 7 of 9 – Cable Systems and Terminations	Slide set Worksheet	Classroom environment AS/NZS 3000
	Knowledge Evidence 8 of 9 – Switchboards and Loads	Slide set Worksheet	Classroom environment AS/NZS 3000
Knowledge Evidence 9 of 9 – AS/NZS 3017 and 3012	Slide set Worksheet	Classroom environment AS/NZS 3017 AS/NZS 3012	

Learning and assessment resources - Stand-alone

Unit of competency	Assessment name	Learning resources	Assessment resources
Batteries Install: UEERE4001 - Install, maintain and fault find battery storage systems for grid-connected photovoltaic systems	Performance Evidence 1 of 2 – Install	Slide set Worksheet	Workshop environment Batteries and equipment
	Performance Evidence 2 of 2 – Testing and Maintenance	Slide set Worksheet	Workshop environment Fault-finding boards
	Knowledge Evidence 1 of 3 – AS/NZS 5139 and Installation	Slide set Worksheet	Classroom environment AS/NZS 3000 AS/NZS 5139
	Knowledge Evidence 2 of 3 – Batteries	Slide set Worksheet	Classroom environment AS/NZS 5139
	Knowledge Evidence 3 of 3 – Chargers and Inverters	Slide set Worksheet	Classroom environment AS/NZS 5139
Batteries Design: UEERE5001 - Design battery storage systems for grid-connected photovoltaic systems	Performance Evidence 1 of 2 – Design Assignment	Slide set Worksheet	Classroom environment AS/NZS 5139
	Knowledge Evidence 1 of 2 – Energy	Slide set Worksheet	Classroom environment
	Knowledge Evidence 2 of 2 – Batteries	Slide set Worksheet	Classroom environment AS/NZS 5139
	Knowledge Evidence 3 of 3 – Chargers and Inverters	Slide set Worksheet	Classroom environment AS/NZS 5139
Fibre: UEEDV0006 - Install and modify optical fibre performance data communication cabling	Performance Evidence 1 of 1 – Fibre install	Slide set Worksheet	Workshop environment Communications cables, termination equipment and testing equipment
	Knowledge Evidence 1 of 2 – Cabling	Slide set Worksheet	Classroom environment Internet Access AS/NZS 11801 (series)
	Knowledge Evidence 2 of 2 – Fibre optics	Slide set Worksheet	Classroom environment Internet Access AS/NZS 11801 (series)

9. Learning Resources:

Learning resources:

For learning resources used, see:

- 8. Assessment Resources, Methods and Timing:
 - Learning and assessment resources

For the break down of units of competency into topics and days that learning activities will occur, see:

- 7. Duration and Scheduling:

Learning resources availability:

Learning resources are available:

- In structured classes
- During tutorial evenings 4 pm – 6:30 pm Tuesday, Wednesday and Thursday evenings
- Via email administration@gets.edu.au
- Web: www.gets.edu.au

See also:

- 11. Physical Resources:

10. Human Resources:

Trainers and Assessors at a unit of competency level:

A list of Trainers and Assessors at a unit of competency level and their credentials is available on request.

Competency and qualification assessment decisions:

All competency and qualification assessment decisions are made by the Head Trainer, currently Ben Murphy.

Assessor requirements - Core units:

Core unit of competency	Assessors must hold a current unrestricted electrical licence
Orientation: UEECO0023 - Participate in electrical work and competency development activities	No
WH&S: UEECD0007 - Apply work health and safety regulations, codes and practices in the workplace	No
CPR: HLTAID001 - Provide cardiopulmonary resuscitation	No. Current first aid certificate required
Live Rescue: UETTDRRF06 - Perform rescue from a live LV panel	No
Workshop: UEECD0019 - Fabricate, assemble and dismantle utilities industry components	No
Fixings: UEECD0020 - Fix and secure electrotechnology equipment	No
Drawings: UEECD0051 - Use drawings, diagrams, schedules, standards, codes and specifications	No
Series DC: UEECD0046 - Solve problems in single path circuits	No
Parallel DC: UEECD0044 - Solve problems in multiple path circuits	No
Cables: UEEEL0023 - Terminate cables, cords and accessories for low voltage circuits	Yes
Magnetism: UEEEL0021 - Solve problems in magnetic and electromagnetic devices	Yes
DC Machines: UEEEL0019 - Solve problems in direct current (d.c.) machines	Yes
AC Theory: UEEEL0020 - Solve problems in low voltage a.c. circuits	Yes

Core unit of competency	Assessors must hold a current unrestricted electrical licence
Transformers: UEEEL0025 - Test and connect transformers	Yes
AC Machines: UEEEL0024 - Test and connect alternating current (a.c.) rotating machines	Yes
Environmental: UEERE0001 - Apply environmentally and sustainable procedures in the energy sector	No
Power: UEEEL0010 - Evaluate and modify low voltage socket outlets circuits	Yes
Heating: UEEEL0008 - Evaluate and modify low voltage heating equipment and controls	Yes
Lighting: UEEEL0009 - Evaluate and modify low voltage lighting circuits, equipment and controls	Yes
Risk Assessment: UEECD0016 - Document and apply measures to control WHS risks associated with electrotechnology work	No
Protection Methods: UEEEL0003 - Arrange circuits, control and protection for electrical installations	Yes
Alternative Supplies: UEEEL0047 - Identify, shut down and restart systems with alternate supplies	Yes
Testing: UEEEL0014 - Isolate, test and troubleshoot low voltage electrical circuits	Yes
Cable Selection: UEEEL0018 - Select wiring systems and select cables for low voltage electrical installations	Yes
Control Circuits: UEEEL0005 - Develop and connect electrical control circuits	Yes
Equipment Install: UEEEL0012 - Install low voltage wiring, appliances, switchgear and associated accessories	Yes
Capstone: UEEEL0039 - Design, install and verify compliance and functionality of general electrical installations	Yes

Assessor requirements - Electives:

Elective unit of competency	Assessors must hold a current unrestricted electricians licence
Solar Basics: UEERE0022 - Solve basic problems in photovoltaic energy apparatus and systems	No
Solar Install: UEERE0016 - Install, configure and commission LV grid-connected photovoltaic power systems	No
Solar Design:	No

Elective unit of competency	Assessors must hold a current unrestricted electricians licence
UEERE0011 - Design grid-connected photovoltaic power supply systems	
Interval Metering: UEEEL0013 - Install, set up and commission interval metering	No
ACMA: UEEDV0005 - Install and maintain cabling for multiple access to telecommunication services	No
Structured and Coax: UEEDV0008 - Install, modify and verify coaxial and structured communication copper cabling	No
PLCs: UEEIC0013 - Develop, enter and verify discrete control programs for programmable controllers	No

Assessor requirements - Stand-alone:

Stand-alone unit of competency	Assessors must hold a current unrestricted electricians licence
Batteries Install: UEERE4001 - Install, maintain and fault find battery storage systems for grid-connected photovoltaic systems	No
Batteries Design: UEERE5001 - Design battery storage systems for grid-connected photovoltaic systems	No
Fibre: UEEDV0006 - Install and modify optical fibre performance data communication cabling	No

11. Physical Resources:

Resources available at a unit of competency level:

For learning and assessment resources used, see:

- 8. Assessment Resources, Methods and Timing:
 - Learning and assessment resources

Physical resources available:

Physical resources include however are not limited to:

Training facility summary: <ul style="list-style-type: none"> • Total area 600 m² • DC Electrical training room and laboratory 112 m² • AC Electrical training room and laboratory 84 m² • Solar room 82 m² 	Learner facilities: <ul style="list-style-type: none"> • Library of electrical theory text books for borrowing • Magazine rack with industry specific publications • Hands-on display shelves and table • Notice board
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<ul style="list-style-type: none"> • Telecommunications training room 50 m² • Training material storage area and workshop 52 m² • Secure office area with serving counter 60 m² • Meeting room and separate office space 12 m² • Staff room 12 m² • Waiting room 32 m² • Lunch room 40 m² • Learner kitchenette 12 m² • Staff/learner kitchenette 12 m² • Outdoor eating area 12 m² • Office/general storage area 14 m² • Male and Female toilets upstairs 16 m² • Male and Female toilets downstairs 6 m² • Unisex disabled toilet downstairs 6 m² 	<ul style="list-style-type: none"> • Online internet support • GETS video topic support <p>Office furniture:</p> <ul style="list-style-type: none"> • Desks x 6 • Desk draws x 8 • Compactus • 4 Draw filing cabinets x 8 • Cabinets x 4 • Shelves x 11
<p>Kitchenette lunch room facilities:</p> <ul style="list-style-type: none"> • Kitchenettes x 2 • Tables and chairs to accommodate 26 • Tea, coffee and condiments provided • Chilled and filtered water or boiled water provided • Microwave, pie oven, toaster and sandwich maker • Barbecue 	<p>Office equipment:</p> <ul style="list-style-type: none"> • Cross-cut shredder x 2 • Book binding machine • A3/A4 guillotine • A3 and A4 laminator • Office equipment – various • Document protectors – various
<p>Recycling facilities:</p> <ul style="list-style-type: none"> • Paper and cardboard • Mixed recycling • Compost • Scrap copper • Scrap metal • Batteries, compact fluorescents, phones and printer cartridges • '2nd life' electrical and office equipment recycling area 	<p>Information technology:</p> <ul style="list-style-type: none"> • Desktop computers with dual monitors x 5 • Class room trainer computers with dual monitors and AV connections x 4 • Office laptops x 2 • Learner laptops x 40 • Server rack <p>Printing and photocopying:</p> <ul style="list-style-type: none"> • Colour photocopiers x 2 • Black and white photocopiers x 2 • Colour printer/scanner x 3

Practical equipment, test equipment and demonstration resources available:

Assessment resources include however are not limited to:

Power supplies	
<p>DC Laboratory</p> <ul style="list-style-type: none"> • 0-30 V DC variable power supply to 10 laboratory benches (20 places) 	<p>AC Laboratory</p> <ul style="list-style-type: none"> • 24 V AC, 3 phase supply to 10 laboratory benches (10 places) • Additional DC variable power supplies x 5 • Variac 1 A x 1 • Variac 8 A x 1
Purpose built electrical boxes	
<p>Purpose built electrical practical boxes for laboratory experiments:</p> <ul style="list-style-type: none"> • 13 types, 18 of each 	
Electrical meters	
DC Laboratory:	AC Laboratory

<ul style="list-style-type: none"> Digital multi-meters x 30 LCR meters x 10 	<ul style="list-style-type: none"> Digital multi-meters x 20 LCR meters x 6
<p>Other meters:</p> <ul style="list-style-type: none"> Insulation Resistance tester x 8 Lux meters x 2 Infra read thermometers x 2 Tachometers x 5 Phase rotation meter x 2 Fault Loop Impedance tester x 1 RCD tester x 1 Low ohm meter x 1 Contact type voltage indicators - Various x 6 Non-contact type voltage indicators x 2 Resistor box test equipment x 8 Earth training leads x 3 	<p>Telecommunications</p> <ul style="list-style-type: none"> Fluke TDX x 1 Optical Time Domain Reflectometer x 1 Fibre optic light source and power meter x 1 Fibre optic cable identifier x 3 Butinski phone x 3 Wire mapper x 8 Coax identifier x 1 Coaxial signal strength meter x 1 <p>Solar:</p> <ul style="list-style-type: none"> Pyronometer x 3 DC Clamp meter x 3 Solar Sunpath diagram x 3
<p>Energy monitoring:</p> <ul style="list-style-type: none"> Watt, Volt Amp, kW.Hr, power factor, energy monitoring equipment: <ul style="list-style-type: none"> Up to 10A x 3 Up to 300A x 1 	<p>Oscilloscopes</p> <ul style="list-style-type: none"> 4 channel oscilloscopes x 3 Hand held oscilloscopes x 2
Electrical wiring	
<ul style="list-style-type: none"> Practical demonstration equipment x 30 kits Electrical cable and accessories x 5 shelves Electrical cable roller/rack, various types and sizes Roller cases of fixings and electrical accessories x 6 	<ul style="list-style-type: none"> Temporary power boards on stands x 2 600 x 600 metal boxes for switchboard practicals x 6 Demonstration boards x 5
Control Circuits	
<ul style="list-style-type: none"> Control circuit equipment – Various x 20 kits Control circuit display boards x 6 	<ul style="list-style-type: none"> PLCs - various x 7 different types/brands PLC software x 2 different types/brands
Testing and fault-finding	
<ul style="list-style-type: none"> Boards with 6 individual faults that can be introduced into the circuits x 4 	<ul style="list-style-type: none"> Lock-out tag out circuit breaker testing boards x 2 Lock out tag out kit x 2
Workshop	
<ul style="list-style-type: none"> 4 large work benches, space for 16 learners Guillotine bender and roller machines x 3 Bench grinder x 3 Bench drill x 2 	<ul style="list-style-type: none"> Soldering Irons x 20 Stick welder and screen x 2 Welding apron, gloves and mask x 4 Hand and power tools x 8 boxes
Transformers	
<ul style="list-style-type: none"> Transformers suitable for operation at 24 V x 20 Transformers other x 40 	<ul style="list-style-type: none"> Dissectable transformers x 40
Motors	
<ul style="list-style-type: none"> 3 phase AC motors suitable for operation at 24 V x 18 Disassembled motors x 40 	<ul style="list-style-type: none"> Variable Speed Drive x 1
Renewables	
<ul style="list-style-type: none"> Solar machines for measuring voltage and 	<ul style="list-style-type: none"> 2 x moveable boards with Solar panels mounted

<p>current output of panels at different tilt angles, orientations, shading and wave lengths x 8</p> <ul style="list-style-type: none"> • Areas for mounting solar panels, cabling, isolators and inverters: <ul style="list-style-type: none"> ◦ Tile roof ◦ Tin roof ◦ Flat roof • Solar boards for testing <ul style="list-style-type: none"> ◦ 2 x moveable boards with solar panels mounted on them for testing ◦ Each board has 5 different faults that can be added into the circuit for testing and fault finding practice • Isolators x 20 • Batteries equipment 	<p>on them for live commissioning in sunlight, including:</p> <ul style="list-style-type: none"> ◦ Extension lead for connecting AC side and feeding power into grid ◦ 600 x 600 metal box with fuse, kW.hr meter and switch board ◦ AC isolator ◦ Inverter ◦ Array Main Switch (DC isolator) ◦ Roof isolator ◦ 4 x solar panels <ul style="list-style-type: none"> • Practical demonstration equipment including Micro inverters and optimisors • Cable and termination equipment
Telecommunications	
<p>Speciality termination tools:</p> <ul style="list-style-type: none"> • IDC termination tools x 20 • 110 termination tools x 6 • Cable stripper x 20 • Coax hex crimp x 20 • Coax compression crimp x 8 • Coax reamer x 5 • Fibre optic 3 hole stripper x 8 • Kevlar scissors x 8 • Fibre cleavers x 3 • Fibre optic inspection tool x 2 	<p>Fault-finding boards:</p> <ul style="list-style-type: none"> • Telephone and structured cabling testing boards with faults x 3 <p>Server racks x 2:</p> <ul style="list-style-type: none"> • Interconnected with cable tray • Fibre optic break-out trays and patch panels x 4 • Cat 5e patch panel x 2 • Cat 6 patch panel x 2 • Cat 6a shielded cable patch panel x 2
<p>Demonstration equipment:</p> <ul style="list-style-type: none"> • Practical demonstration equipment x 10 kits • Main data frame telephone display board • Free-to-air coaxial cabling display board 	<p>Telecommunications cable:</p> <ul style="list-style-type: none"> • Phone cable: <ul style="list-style-type: none"> ◦ 4, 10, 20, 50 pair internal and external • Structured cable: <ul style="list-style-type: none"> ◦ Cat 5e, Cat 6, Cat 6a shielded • Coaxial cable: <ul style="list-style-type: none"> ◦ RG45 shielded • Fibre optic cable: <ul style="list-style-type: none"> ◦ Single, 60, 120 fibre
<p>Workshop:</p> <ul style="list-style-type: none"> • Stations for installing telecommunications equipment on boards x 12 • Telecommunications cable and accessories x 2 cupboards 	

12. Strategies for ‘stand-alone’ single units or Skill Sets:

Stand-alone or single units:

As per:

- 3. Target Group:
 - Stand-alone units - Various

Skill Sets:

Skill sets are not currently maintained on our scope of registration with the Australian Skills Quality Authority.

13. Assessment-Only Pathways:

Core and elective units of competency:

Assessment only pathways may be used for specific units of competence in accordance with the following sections of this document:

- 4. Target Group:
 - Qualification enrolment - Applying for a reduction in time due to prior trade or experience:
 - Qualification enrolment - Prior off-the-job training and assessment however competency was not achieved:

UEE30820 Qualification:

Assessment-only pathways are not offered for the UEE30820 qualification with the exception of the above. This is due to the high risk nature of electrical work.

UEEEL0039 - Design, install and verify compliance and functionality of general electrical installations

Assessment-only pathways will not be used for UEEEL0039 in accordance with Access Canberra Construction Occupations Licensing Registrar requirements.

14. Version Control:

Version	Date of release	Author	Authorised by	Position	Reason for change
V1	29/9/2015	Ben Murphy	Ben Murphy	Proprietor / Chief Executive	Initial release for initial registration application with ASQA
V2	29/02/16	Ben Murphy	Ben Murphy	Proprietor / Chief Executive	To incorporate Standards for ACT Apprenticeships after successful User Choice funding application
V3	26/04/17	Ben Murphy	Ben Murphy	Proprietor / Chief Executive	Revision prior to ASQA post initial registration audit.
V4	18/11/20- Draft	Ben Murphy	Ben Murphy	Proprietor / Chief Executive	Development for new Training Package UEE30820