


Qualification outline: UEE30820 - Certificate III in Electrotechnology Electrician
Global Energy Training Solutions - RTO code: 41319

	Term 1		Term 2		Term 3		Term 4	
Yr 1	Orientation UEECO0023 1 day WH&S UEECD0007 2 days	Workshop UEECD0019 5 days	Drawings UEECD0051 5 days	Fixings UEECD0020 1 day CPR HLTAID009 1/2 day Live Rescue UETDRRF004 1/2 day	Series DC UEECD0046 4 days	Parallel DC UEECD0044 6 days	Cables UEEEL0023 3 days	Magnetism UEEEL0021 3 days DC Machines UEEEL0019 3 days
Yr 2	AC Theory UEEEL0020 10 days		Transformers UEEEL0025 2 days AC Machines UEEEL0024 4 days		Environmental UEERE0001 2 days	Power UEEEL0010 2 days Heating UEEEL0008 2 days Lighting UEEEL0009 2 days	Risk Assessment UEECD0016 1 day Protection Methods UEEEL0003 5 days	Alternative Supplies UEEEL0047 2 days Testing UEEEL0014 3 days
Yr 3	Cable Selection UEEEL0018 8 days		Control Circuits UEEEL0005 7 days		Equipment Install UEEEL0012 3 days	<p align="center">+ Electives</p> <p align="center">Electives are mostly evening courses with occasional day courses</p> <p align="center">120 points of electives required</p> <p align="center">See electives on offer overleaf</p>		
Yr 4	<p align="center">Categories</p> <p align="center">Cabling or practical Electrical theory Australian wiring rules Electives</p>		<p align="center">Site visits</p> <p align="center">From Magnetism UEEEL0021 onwards, site visits are required for verification of competency</p>		<p align="center">Tutorials</p> <p align="center">Tuesday, Wednesday and Thursday afternoons From 4 pm to 6:30 pm during term and some term breaks</p>		<p align="center">Capstone UEEEL0039 8 days (over 3 weeks)</p>	

1 st year	2 nd year	3 rd year	Capstone
<p>Orientation:</p> <ul style="list-style-type: none"> UEECO0023 - Participate in electrical work and competency development activities <p>WH&S:</p> <ul style="list-style-type: none"> UEECD0007 - Apply work health and safety regulations, codes and practices in the workplace <p>Workshop:</p> <ul style="list-style-type: none"> UEECD0019 - Fabricate, assemble and dismantle utilities industry components <p>Drawings:</p> <ul style="list-style-type: none"> UEECD0051 - Use drawings, diagrams, schedules, standards, codes and specifications <p>Fixings:</p> <ul style="list-style-type: none"> UEECD0020 - Fix and secure electrotechnology equipment <p>CPR:</p> <ul style="list-style-type: none"> HLTAID009 - Provide cardiopulmonary resuscitation <p>Live Rescue:</p> <ul style="list-style-type: none"> UETDRRF004 - Perform rescue from a live LV panel 	<p>AC Theory:</p> <ul style="list-style-type: none"> UEEEL0020 - Solve problems in low voltage a.c. circuits <p>Transformers:</p> <ul style="list-style-type: none"> UEEEL0025 - Test and connect transformers <p>AC Machines:</p> <ul style="list-style-type: none"> UEEEL0024 - Test and connect alternating current (a.c.) rotating machines <p>Environmental:</p> <ul style="list-style-type: none"> UEERE0001 - Apply environmentally and sustainable procedures in the energy sector <p>Power:</p> <ul style="list-style-type: none"> UEEEL0010 - Evaluate and modify low voltage socket outlets circuits <p>Heating:</p> <ul style="list-style-type: none"> UEEEL0008 - Evaluate and modify low voltage heating equipment and controls <p>Lighting:</p> <ul style="list-style-type: none"> UEEEL0009 - Evaluate and modify low voltage lighting circuits, equipment and controls 	<p>Cable Selection:</p> <ul style="list-style-type: none"> UEEEL0018 - Select wiring systems and select cables for low voltage electrical installations 	<p>Capstone:</p> <ul style="list-style-type: none"> UEEEL0039 - Design, install and verify compliance and functionality of general electrical installations
<p>Series DC:</p> <ul style="list-style-type: none"> UEECD0046 - Solve problems in single path circuits <p>Parallel DC:</p> <ul style="list-style-type: none"> UEECD0044 - Solve problems in multiple path circuits 	<p>Risk Assessment:</p> <ul style="list-style-type: none"> UEECD0016 - Document and apply measures to control WHS risks associated with electrotechnology work <p>Protection Methods:</p> <ul style="list-style-type: none"> UEEEL0003 - Arrange circuits, control and protection for electrical installations <p>Alternative Supplies:</p> <ul style="list-style-type: none"> UEEEL0047 - Identify, shut down and restart systems with alternate supplies 	<p>Control Circuits:</p> <ul style="list-style-type: none"> UEEEL0005 - Develop and connect electrical control circuits 	<p>Stand-alone courses</p>
<p>Cables:</p> <ul style="list-style-type: none"> UEEEL0023 - Terminate cables, cords and accessories for low voltage circuits 	<p>Testing:</p> <ul style="list-style-type: none"> UEEEL0014 - Isolate, test and troubleshoot low voltage electrical circuits 	<p>Equipment Install:</p> <ul style="list-style-type: none"> UEEEL0012 - Install low voltage wiring, appliances, switchgear and associated accessories 	<p>Solar Design:</p> <ul style="list-style-type: none"> UEERE0061 - Design grid-connected photovoltaic power supply systems <p>Battery Install: (30 points)</p> <ul style="list-style-type: none"> UEERE0078 - Install battery storage to power conversion equipment <p>Battery Inverter Install: (30 points)</p> <ul style="list-style-type: none"> UEERE0077 - Install battery storage equipment power conversion equipment to grid <p>Battery Design:</p> <ul style="list-style-type: none"> UEERE0060 - Design grid-connected battery storage systems <p>Fibre:</p> <ul style="list-style-type: none"> UEEDV0006 - Install and modify optical fibre performance data communication cabling <p>Notes:</p> <ul style="list-style-type: none"> Additional fees apply for apprenticeship training over 120 or 130 points Prerequisites apply
<p>Magnetism:</p> <ul style="list-style-type: none"> UEEEL0021 - Solve problems in magnetic and electromagnetic devices <p>DC Machines:</p> <ul style="list-style-type: none"> UEEEL0019 - Solve problems in direct current (d.c.) machines 		<p>Elective option 1 – Renewables (130/120 elective points)</p>	<p>Acknowledgment: Australian Apprenticeships in the ACT are funded by the ACT and Australian Governments.</p>
		<p>Elective option 2 – Telecommunications (120/120 elective points)</p>	 <p>RTO code: 41319</p> <p>UEE30820_Qualification_Outline_V2.3</p>
		<p>Grid Connect Site Survey: (30 points)</p> <ul style="list-style-type: none"> UEERE0054 - Conduct site survey for grid-connected photovoltaic and battery storage systems <p>Solar Install: (30 points)</p> <ul style="list-style-type: none"> UEERE0081 - Install photovoltaic systems to power conversion equipment <p>Solar Inverter Install: (30 points)</p> <ul style="list-style-type: none"> UEERE0080 - Install photovoltaic power conversion equipment to grid <p>Smart Control: (40 points)</p> <ul style="list-style-type: none"> UEECD0028 - Plan an integrated cabling installation system 	
		<p>Telecommunications</p> <p>ACMA: (80 points)</p> <ul style="list-style-type: none"> UEEDV0005 - Install and maintain cabling for multiple access to telecommunication services <p>Structured & Coax: (40 points)</p> <ul style="list-style-type: none"> UEEDV0008 - Install, modify and verify coaxial and structured communication copper cabling 	