



**Australian Government**

# **UEE41711 Certificate IV in Rail - Communications and Network Systems**

**Release 4**

## UEE41711 Certificate IV in Rail - Communications and Network Systems

### Modification History

Release	Action	Core/Elective	Details	Points
2	Edit		Edit Name to reflect correct Unit title UEENEED104A Use engineering applications software on personal computers	40
2	Update	Group A	HLTCPR211A Perform CPR	10

3	Edit	Core	Edit Name to reflect correct Unit title UEENEEK145A Implement and monitor energy sector environmental and sustainable policies and procedures	20
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4	Update	Elective	HLTAID001 - Provide cardiopulmonary resuscitation	10
4	Edit	Core	Correct title of UEENEEE101A - Apply Occupational Health and Safety regulations, codes and practices in the workplace	20
4	Edit	Core	Correct title of UEENEEE102A - Fabricate, assemble and dismantle utilities industry components	40
4	Edit	Core	Correct title of UEENEEH102A - Repairs basic electronic apparatus faults by replacement of components	40
4	Edit	Elective	Correct title of UEENEED101A - Use computer applications relevant to a workplace	20
4	Edit	Elective	Correct title of UEENEEH127A - Set up and adjust commercial radio frequency (RF) transmission and reception systems	60
4	Edit	Elective	Correct title of UEENEEH129A - Fault find and repair navigation systems	60

4	Edit	Elective	Correct title of UEENEEH137A - Program and commission commercial video/audio systems	40
4	Edit	Elective	Correct title of UEENEEH175A - Troubleshooting in security system installations	60
4	Edit	Elective	Correct title of UEENEEH176A - Diagnose and rectify faults in electronic display circuits	60
4	Edit	Elective	Correct title of UEENEEH177A - Diagnose and rectify faults in recording and replay equipment	60
4	Edit	Elective	Correct title of UEENEEH178A - Diagnose and rectify faults in camera circuits and equipment	60
4	Edit	Elective	Correct title of UEENEEH179A - Diagnose and rectify faults in digital television circuits and apparatus	80
4	Edit	Elective	Correct title of UEENEEH180A - Diagnose and rectify faults in digital transmission circuits and systems	80

## Description

### Scope

This qualification provides competencies to select, install, commission, fault find and maintain radio and dedicated telecommunications networks in rail systems.

## Pathways Information

Not applicable.

## Licensing/Regulatory Information

Not applicable.

## Entry Requirements

Not applicable.

## **Employability Skills Summary**

Not applicable.

## Packaging Rules

### Completion requirements

The requirements for granting this qualification will be met when competency is demonstrated and achieved for:

All the Core competency standard units, defined in the Core Competency Standard Units table below and

A combination of Elective competency standard units to achieve a total weighting of 560 points in accordance with the Elective Competency Standard Units table below.

Core Competency Standard Units All Core competency standard units to be achieved		Weighting Points
UEENEEE038B	Participate in development and follow a personal competency development plan	20
UEENEEE101A	Apply Occupational Health and Safety regulations, codes and practices in the workplace	20
UEENEEE102A	Fabricate, assemble and dismantle utilities industry components	40
UEENEEE104A	Solve problems in d.c. circuits	80
UEENEEE107A	Use drawings, diagrams, schedules, standards, codes and specifications	40
UEENEEE117A	Implement and monitor energy sector OHS policies and procedures	20
UEENEEE124A	Compile and produce an energy sector detailed report	60
UEENEEE137A	Document and apply measures to control OHS risks associated with electrotechnology work	20
UEENEEH102A	Repairs basic electronic apparatus faults by replacement of components	40
UEENEEH111A	Troubleshoot single phase input d.c. power supplies	40
UEENEEH112A	Troubleshoot digital sub-systems	80
UEENEEH113A	Troubleshoot amplifiers in an electronic apparatus	80
UEENEEH114A	Troubleshoot resonance circuits in an electronic apparatus	80

UEENEEH138A	Fault find and repair complex power supplies	40
UEENEEH139A	Troubleshoot basic amplifier circuits	40
UEENEEK145A	Implement and monitor energy sector environmental and sustainable policies and procedures	20
<b>Total points in core</b>		<b>720</b>

### Elective Competency Standard Units

Complete Elective units to achieve a total of weighting of 560 points from the following groups:

Group		Minimum points	Maximum points
<b>A</b>	<b>Imported and Common Elective Units</b> Imported units from other training packages and/or state accredited courses can be added to this group, but they must be selected from qualifications where the unit is first packaged at AQF level 4. If units have not being assigned a weighting by the relevant EE-Oz Industry Technical Advisory Committee, their weighting will be 10 points.	0	220
<b>B</b>	<b>Qualification Elective Units</b>	0	340
<b>C</b>	<b>Qualification Elective Units</b> You may select all your elective units from this Group	220	560

Group A – Imported and Common Elective Units		Weighting Points
You may complete units to a maximum weighting of 220		
UEENEEC001B	Maintain documentation	20
UEENEEC002B	Source and purchase material/parts for installation or service jobs	20
UEENEEC003B	Provide quotations for installation or service jobs	20
UEENEEC010B	Deliver a service to customers	20
UEENEEC101A	Use computer applications relevant to a workplace	20

UEENEEE009B	Comply with scheduled and preventative maintenance program processes	20
UEENEEE020B	Provide basic instruction in the use of electrotechnology apparatus	20
CPCCOHS1001A	Work safely in the construction industry	10
HLTAID001	Provide cardiopulmonary resuscitation	10
	<p>Imported units from other training packages and/or state accredited courses can be added to this group, but they must be selected from qualifications where the unit is first packaged at AQF level 4. If units have not being assigned a weighting by the relevant EE-Oz Industry Technical Advisory Committee, their weighting will be 10 points.</p> <p>Note: For further information see Application of the NQC Flexibility Formula, UEE11 Electrotechnology Training Package, Version 1, Volume 1 Qualification Framework</p>	Up to 220 points

<b>Group B – Qualification Elective Units</b> You may complete units to a maximum weighting of 340		<b>Weighting Points</b>
UEENEED104A	Use engineering applications software on personal computers	40
UEENEEF102A	Install and maintain cabling for multiple access to telecommunication services	120
UEENEEF104A	Install and modify performance data communication copper cabling	40
UEENEEF105A	Install and modify optical fibre performance data communication cabling	40
UEENEEF107A	Set up and configure the wireless capabilities of communications and data storage devices	40
UEENEEF108A	Select and arrange equipment for wireless communication networks	60
UEENEEF109A	Install and connect data and voice communication equipment	40
UEENEEF110A	Select and arrange data and voice equipment for local area networks	40
UEENEEH115A	Develop software solutions for microcontroller based systems	60

<b>Group C – Qualification Elective Units</b> You must complete units to a minimum weighting of 220 You may select all your elective units from this Group		<b>Weighting Points</b>
UEENEEH127A	Set up and adjust commercial radio frequency (RF) transmission and reception systems	60
UEENEEH129A	Fault find and repair navigation systems	60
UEENEEH137A	Program and commission commercial video/audio systems	40
UEENEEH175A	Troubleshooting in security system installations	60
UEENEEH176A	Diagnose and rectify faults in electronic display circuits	60



UEENEEH177A	Diagnose and rectify faults in recording and replay equipment	60
UEENEEH178A	Diagnose and rectify faults in camera circuits and equipment	60
UEENEEH179A	Diagnose and rectify faults in digital television circuits and apparatus	80
UEENEEH180A	Diagnose and rectify faults in digital transmission circuits and systems	80

**Note:**

1. Prerequisite pathways shall be identified and met for all elective units selected.
2. In selecting elective units considerations to career planning advice should be given to units that form part of a prerequisite pathway for the progression to achieve particular competencies or qualification at a higher level.

**END OF QUALIFICATION****Custom Content Section**

Not applicable.