



National Graduate Diploma in Electricity Supply (High Voltage Line Construction and Maintenance)

level of qualification: 7

credit total: 210

Purpose and content of the National Certificate

Purpose:

This graduate diploma is for engineering personnel working or intending to work in the construction or maintenance of high voltage lines. It provides a basis for the professional development of engineers already qualified from a range of disciplines, enabling them to up skill to the requirements necessary for the construction and maintenance of high voltage lines.

Content:

Compulsory unit standards

project management

	level	credit
25217 Apply risk management techniques to a project	4	5

professional practice in design and construction consultancy

2065 Apply management procedures to design and construction projects	5	8
2090 Control design and construction project expenditure	7	4

electrotechnology

22734 Demonstrate and apply introductory knowledge of electrotechnology engineering mathematics	4	15
22740 Demonstrate knowledge of project management in an electrotechnology engineering environment	6	15

power system management

11578 Describe and apply electricity power transmission technology	6	15
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transmission networks

10519 Construct transmission tower foundations	4	10
18025 String, install, and attach transmission network conductors	4	10
24748 Erect electricity transmission towers	4	10



		level	credit
26013	Demonstrate knowledge of high voltage overhead line route selection	7	15
26014	Demonstrate knowledge of the fundamentals of power system earthing	7	15
26015	Demonstrate knowledge of electrical overhead line design	7	20
26016	Demonstrate knowledge of mechanical overhead line design	7	20
process and materials engineering			
11378	Manage the storage, handling, and transportation of materials	6	8
Elective			
A minimum of 40 credits			
civil construction supervision			
6428	Demonstrate knowledge of engineering survey and set-out for civil construction work	4	20
22294	Set out levels and positions in civil construction projects	4	10
transmission networks			
20413	Carry out condition assessments of electricity supply wooden pole structures	4	6
20414	Carry out condition assessments of electricity supply concrete and steel pole structures	4	6
20415	Carry out condition assessments of electricity supply steel tower structures	4	5
20416	Carry out condition assessments of electricity supply line hardware and conductors	4	5
20847	Carry out a line patrol on an electricity supply network	4	6
process and materials engineering			
11365	Demonstrate knowledge of corrosion	6	8
11366	Select materials for manufacturing and construction	6	10
11369	Treat and coat surfaces	6	10
11370	Demonstrate knowledge of engineering materials	5	24