Electrotechnology Qualifications

Certificate IV - Electrotechnology Systems Electrician (UTE 4 12 02)

Modules / Core Units

Nat. Code	Title		Dur	NES207B	NES302B	NES403B	NES502B	NES703B
EA903	Industrial Computer Systems	C	1	1	1	1	1	1
EA904	Control Concepts	C	1	1	1	1	1	1
NE005	Power Control Devices	R	1	1	1	1	1	1
NE177	Programmable Logic Controllers 1 (PLC's)	C	1	1	1	1	1	1
NE179	Digital Electronics 1	C	1	1	1	1	1	1
NE182	Amplifiers 1	C	1	1	1	1	1	1
NUE213	OH&S Implementation & Monitoring	C	0.5	0.5	0.5	0.5	0.5	0.5
EA076	Thyristor (Power) Converters	R	1					
EA102	Establishing & Managing an Electrical Contractor's Business	C	0.5					
EA103	Small Electrical Business and the Law	C	1					
EA104	Estimating, Tendering and Contracting	C	1					
EA105	Financing and Controlling	C	1					
EA112	Introduction to Lighting	C	0.5					
EA114	Quality & Quantity of Light	C	1					
EA160	Advanced PLCs	R	1.5					
EA921	Sensors for Machinery & Product Monitoring	C	0.5					
EA929	SCADA Systems	R	1					
EB160	PLC Systems Applications	R	2					
NUE066	Circuit Development 2	N	1					
NE043	Distribution Transformers	C	1					
NE045	Power Distribution Systems - Operating Characteristics	C	0.5					
NE046	Power Distribution Systems - Protection & Relaying	C	1					
NE064	Variable Speed Drives	R	2					
NE176	Programmable Controllers - Basic[1]	R	0.5					
NI207	Process Control Principles	C	1					
NI209	Control Valves	C	1					
NI216	Water Analysis	C	0.5					
NM030	Fluid Power	C	1.5					
NUE405	Electrical Installation – Design/ Equipment Selection 3 *(prev NUE600)*	N	1					
NUE404	Electrical Installations – special Situation *(prev NUE601)*	N	1					
NUE605	Electrical Systems for Mines 2	C	1					
NRE06	Disconn. & Reconn. HV (to 3.3kV	N	0.5					
NRE07	HV Flex. Cables & Plugs	N	0.2					
NUE658	HV Switching	C	1					
NUE956	Light, Power & Load Managemen	C	1					
NUEH01	Principles of Explosion-protection	C	0.25					
NUEH02	Explosion-protected Equipmen	C	1					
NUEH03	Installation & Maintenance Techniques	C	1					
NUEH04	Detailed Inspection Techniques	C	0.5					
NUEH13	Installation Testing	C	0.25					
NUER19	Grid Connected Inverter Systems v	C	1					
				6.5	6.5	6.5	6.5	6.5

Specialisation – Control / Energy Supply

Nat. Code	Control	Optional Unit NES103B	Optional Unit NES205L	Optional Unit NES414A	Optional Unit NES415A	Optional Unit NES507A	Energy Supply	Optional Unit NES115A	Optional Unit NES205L	Optional Unit NES414A	Optional Unit NES415A	Optional Unit NES507A
EA903												
EA904												
NE005												
NE177												
NE179												
NE182												
NUE213												
EA076	1					1						1
EA102												
EA103												
EA104												
EA105												
EA112												
EA114												
EA160				1.5						1.5		
EA921	0.5		0.5					0.5				
EA929					1						1	
EB160					2						2	
NUE066	1	1	1									
NE043							1		1			
NE045							0.5		0.5			
NE046							1					
NE064						2						2
NE176				0.5						0.5		
NI207												
NI209												
NI216												
NM030		1.5										
NUE405								1				
NUE404												
NUE605												
NRE06												
NRE07												
NUE658			1						1			
NUE956												
NUEH01												
NUEH02												
NUEH03												
NUEH04												
NUEH13												
NUER19								1				
	2.5	2.5	2.5	2	3	3	2.5	2.5	2.5	2	3	3

Specialisation – Hazardous Areas / Install & Servicing

Nat. Code	Hazardous Areas	Optional Unit NES107^	Optional Unit NES408^	Optional Unit NES410^	Optional Unit NES414A	Optional Unit NES415A	Optional Unit NES507A	Install & Servicin	Optional Unit NES104	Optional Unit NES115	Optional Unit NES205L	Optional Unit NES405	Optional Unit NES704	Optional Unit NES023 A	Optional Unit NES414A	Optional Unit NES415A	Optional Unit NES507A
EA903																	
EA904																	
NE005																	
NE177																	
NE179																	
NE182																	
NUE213																	
EA076							1										1
EA102														0.5			
EA103														1			
EA104														1			
EA105														1			
EA112													0.5				
EA114													1				
EA160					1.5										1.5		
EA921	0.5							0.5	0.5	0.5	0.5	0.5					
EA929						1										1	
EB160						2										2	
NUE066																	
NE043																	
NE045																	
NE046																	
NE064							2										2
NE176					0.5										0.5		
NI207																	
NI209																	
NI216																	
NM030																	
NUE405								1	1	1	1	1	1				
NUE404								1				1					
NUE605																	
NRE06																	
NRE07																	
NUE658											1						
NUE956									1								
NUEH01	0.25	0.25	0.25	0.25													
NUEH02	1	1	1	1													
NUEH03	1	1	1	1													
NUEH04				0.5													
NUEH13		0.25	0.25														
NUER19										1							
	2.75	2.5	2.5	2.75	2	3	3	2.5	2.5	2.5	2.5	2.5	2.5	3.5	2	3	3

Specialisation – Mining / Process

Nat. Code	Mining	Optional Unit NES205L	Optional Unit NES212	Optional Unit NES213	Optional Unit NES414A	Optional Unit NES415A	Optional Unit NES507A	Process	Optional Unit NES414A	Optional Unit NES415A	Optional Unit NES507A
EA903											
EA904											
NE005											
NE177											
NE179											
NE182											
NUE213											
EA076							1				1
EA102											
EA103											
EA104											
EA105											
EA112											
EA114											
EA160					1.5				1.5		
EA921	0.5	0.5									
EA929						1				1	
EB160						2				2	
NUE066	1	1	1	1							
NE043											
NE045											
NE046											
NE064							2				2
NE176					0.5				0.5		
NI207								1			
NI209								1			
NI216								0.5			
NM030											
NUE405											
NUE404											
NUE605	1		1	1							
NRE06			0.5								
NRE07				0.2							
NUE658		1									
NUE956											
NUEH01											
NUEH02											
NUEH03											
NUEH04											
NUEH13											
NUER19											
	2.5	2.5	2.5	2.2	2	3	3	2.5	2	3	3

V 3.5 September, 2006 (102 -103 duration swap and 103 name change)

Electrotechnology Qualifications

Certificate IV - Electrotechnology Systems Electrician (UTE 4 12 02)

Modules / Core Units

Nat. Code	Title		Dur	NES207B	NES302B	NES403B	NES502B	NES703B
NEWP103B	Install/Maintain Piping & Tubing *(Electrical)* WP	N	~					
NEWP104	Install & Maintain Energy Management Equipment WP	N	~					
NEWP107^	Install Explosion-protected Equipment & Wiring Systems WP	N	~					
NEWP115	Install & maintain a grid inverter system WP	N	~					
NEWP023	Apply contracting and estimating procedures - WP	N	~					
NEWP205L	Conduct Powerline Switching *(Power & Control -Extra Low Voltage)* WP	N	~					
NEWP207B	Co-ordinate Maintenance of Apparatus & Systems' Circuits *(Electrical)* WP	N	~	WP				
NEWP212	Disconnect & Re-connect HV Electric Propulsion Components Engine Driven, Earth Moving Vehicles 3.3kv WP	N	~					
NEWP213	Attach Flexible Cables & Plugs to Electrical Equipment Connected to a High Voltage Supply WP	N	~					
NEWP302B	Undertake Commissioning of Apparatus & Complex Circuits *(Electrical)* WP	N	~		WP			
NEWP403B	Test Apparatus & Complex Circuits *(Electrical)* WP	N	~			WP		
NEWP405	Inspect Electrical/Electronic Apparatus & Circuits WP	N	~					
NEWP408^	Test Installations in Hazardous Areas WP	N	~					
NEWP410^	Inspect in Detail Hazardous Area Installations WP	N	~					
NEWP414	Program and verify programmable conrollers - WP	N	~					
NEWP415	Program and verify programmable controller systems - WP	N	~					
NEWP502B	Diagnose & Rectify Faults in Apparatus & Complex Circuits *(Electrical)* WP	N	~				WP	
NEWP507	Evaluate performance of motor control systems - WP	N	~					
NEWP703B	Plan Installation of Electrotech Apparatus & Wiring/Piping Systems *(Electrical)* WP	N	~					WP
NEWP704	Plan Illumination Systems WP	N	~					

Specialisation

Nat. Code	Control	Optional Unit NES103B	Optional Unit NES205L	Optional Unit NES414A	Optional Unit NES415A	Optional Unit NES507A	Energy Supply	Optional Unit NES115A	Optional Unit NES205L	Optional Unit NES414A	Optional Unit NES415A	Optional Unit NES507A
NEWP103B		WP										
NEWP104												
NEWP107^												
NEWP115								WP				
NEWP023												
NEWP205L			WP						WP			
NEWP207B												
NEWP212												
NEWP213												
NEWP302B												
NEWP403B												
NEWP405												
NEWP408^												
NEWP410^												
NEWP414				WP						WP		
NEWP415					WP						WP	
NEWP502B												
NEWP507						WP						WP
NEWP703B												
NEWP704												

Nat. Code	Hazardous Areas	Optional Unit NES107^	Optional Unit NES408^	Optional Unit NES410^	Optional Unit NES414A	Optional Unit NES415A	Optional Unit NES507A	Install & Servicin	Optional Unit NES104	Optional Unit NES115	Optional Unit NES205L	Optional Unit NES405	Optional Unit NES704	Optional Unit NES023 A	Optional Unit NES414A	Optional Unit NES415A	Optional Unit NES507A
NEWP103B																	
NEWP104									WP								
NEWP107^		WP															
NEWP115										WP							
NEWP023														WP			
NEWP205L											WP						
NEWP207B																	
NEWP212																	
NEWP213																	
NEWP302B																	
NEWP403B																	
NEWP405												WP					
NEWP408^			WP														
NEWP410^				WP													
NEWP414					WP										WP		
NEWP415						WP										WP	
NEWP502B																	
NEWP507							WP										WP
NEWP703B																	
NEWP704													WP				

Nat. Code	Mining	Optional Unit NES205L	Optional Unit NES212	Optional Unit NES213	Optional Unit NES414A	Optional Unit NES415A	Optional Unit NES507A	Process	Optional Unit NES414A	Optional Unit NES415A	Optional Unit NES507A
NEWP103B											
NEWP104											
NEWP107^											
NEWP115											
NEWP023											
NEWP205L		WP									
NEWP207B											
NEWP212			WP								
NEWP213				WP							
NEWP302B											
NEWP403B											
NEWP405											
NEWP408^											
NEWP410^											
NEWP414					WP				WP		
NEWP415						WP				WP	
NEWP502B											
NEWP507							WP				WP
NEWP703B											
NEWP704											

Please see page titled "Notes to Matricies"