

STATEMENT OF WORK EXPERIENCE/LOGBOOK

Instructional Programme Code:	50908401 National N Diploma: Engineering Studies: Electrical Engineering
SAQA Qualification ID:	90674: National N Diploma, Engineering Studies: Electrical Engineering NQF Level 6, 360 credits
SAQA Learning Programme ID:	67043 National N Diploma: Engineering Studies: Electrical Engineering, NQF Level 6, 360 credits

Learner Details	
Name & Surname:	
ID Number:	

Employer Details	
Company Name:	
Address:	
Supervisor Name:	
Work Telephone:	
E-Mail:	

Employer Details	
Company Name:	
Address:	
Supervisor Name:	
Work Telephone:	
E-Mail:	

Candidate completed a relevant Trade Test or worked in a technical environment relevant to the specialised theoretical subjects:

OFO-CODE	TRADE	[√]	COMMENTS
642701	Air-Conditioning and Refrigeration Mechanic		
642702	Refrigeration Mechanic		
671101	Electrician		
671202	Millwright		
671206	Electrical Equipment Mechanic		
671207	Armature Winder		
671208	Transportation Electrician		
671301	Electrical Line Mechanic		
671302	Cable Joiner		
672104	Electronic Equipment Mechanician		
672105	Instrument Technician		
672107	Special Class Electrician		

Electrical Specialisation

Due to specialisation and the variety of trades (12 Trades) that lead to this diploma a learner needs at least complete at least 10 work experience and related activities in the area of specialisation

Electricians can specialise in:

- construction,
- high voltage installations,
- substations,
- pane wiring, etc.

Artisans in:

- refrigeration,
- air-conditioning,
- armature winding,
- electronics,
- megatronics, etc. and
- Complete electrical subjects.

Components:
Air-conditioning – installation and repairs
Armature Winding – Winding or repairing
Automation – PLC's, Computerised systems, etc.
Battery –Electricity
Bus bars – Safety, Installation. etc.
Cable Jointing
Circuit Board Design - specialisation
Compressors – Air-conditioning, Refrigeration
DB Board Wiring – Building and Fault-finding
DC Converters – Installations and repairs
Digital Controls – installation and fault-finding
Earth leakages
Electric Circuits - Drawings, building and fault-finding
Electric Distribution Systems
Electric Motors – Single and three phase
Electric Power Conversion
Electrical Circuit Design - specialisation
Electrical Circuit Fault Finding
Electrical Equipment - use and repair
Electrical Installations – plan, build and maintain
Electrical Insulation
Electrical Machines – use, repair and maintain
Electrical Measurements
Electrical Standards – Knowledge of standards for installations
Electrical Sub Stations – Safety, installations or maintenance
Electrical Wiring – Install or fault-finding
Electrical Wiring Regulations
Electricity Generation – Heavy Voltage systems
Electrodynamics
Electromagnets – use and maintain
Electronic Circuits - Drawings, building and fault-finding
Electronic Design Automation
Electronic Speed Control
Electronics – Diodes, Capacitors, Resistors, etc.
Generation and Transmission
Hand Tools – Use and Maintain
Health and Safety
High Voltage Switch Gear
Induction Systems
Industrial Automotation – Instrumentation, PLCs, Computerised systems
Instrumentation - Specialisation
Inverters
Isolators
Load Management
Magnetics
Maintenance of electrical installations

Materials – Uses, maintenance, resistance, corrosion, etc.
Microwaves
Motor Starters
Network Protection – design and maintain
Oscilloscopes – use and maintain
Panel Wiring
Phase Conversion
PLCs- Programmable Logic Controllers
Power Storage – Use and maintain
Power Tools - Use and Maintain
Pressure Switches
Reading Meggers
Reading meters (Digital and Analogue)
Reading Taco Meters
Rectifiers
Refrigeration - Specialisation
Renewable Energy – Solar, conservation, etc.
Repair Electrical Appliances
Resistivity
Soldering and De-soldering
Steam plant – maintenance, installation or repair
Surge Protection
Switches
Testing Equipment - use and maintain
Testing of Circuits – use instruments, meters, etc.
Thermal Conductivity
Three Phase Circuits – install, maintain, fault-finding
Transducers – Electronic circuits
Transformers – install, maintain and repair
Use of Multi-meters
Ventilating systems - specialisation

Scope Work Experience

WE1	Perform manual soldering/desoldering for the installation and fabrication of electrical/electronic components.	Date	Signature
Look for evidence that confirms skills in:			
WA0101	Performing routine soldering		
WA0102	Performing desoldering		
WA0103	Undertaking material preparation		
WA0104	Reading and interpreting routine information on written job instructions, specifications and standard operating procedures		
WA0105	Following oral instruction		
WE2	Interpret technical drawing	Date	Signature
Look for evidence that confirms skills in:			
WA0201	Checking the drawing against job requirements/related equipment in accordance with standard operating procedures		
WA0202	Confirming the drawing version as being current in accordance with standard operating procedures		
WA0203	Where appropriate, obtaining the current version of the drawing in accordance with standard operating procedures		
WA0204	Reading, interpreting information on the drawing, written job instructions, specifications, standard operating procedures, charts, lists and other applicable reference documents		
WA0205	Checking and clarifying task related information		

WA0206	Undertaking numerical operations, geometry and calculations/formulae within the scope of this unit		
WE3	Terminate and connect electrical wiring	Date	Signature
Look for evidence that confirms skills in:			
WA0301	Checking materials for conformance to specifications		
WA0302	Checking existing and new installation site for correct location and specification		
WA0303	Making terminations/connections to specification, manufacturer and regulatory requirements		
WA0304	Adjusting and fixing wiring supports		
WA0305	Marking, tagging and labelling cables, wires, conductors and connections to specification		
WA0306	Undertaking testing of wiring and connections for conformance to specification		
WA0307	Using language and literacy skills to complete short reports and required documentation		
WA0308	Reading and interpreting routine information on written job instructions, specifications and standard operating procedures May include drawings		
WA0309	Using measurements for checking connections and components		
WE4	Install and test electrical wiring and circuits up to 1000 volts a.c. and 1500 volts d.c.	Date	Signature
Look for evidence that confirms skills in:			
WA0401	Interpreting circuits, drawings, specifications and instructions		
WA0402	Preparing work plans in accordance with legislative and regulatory requirements and standard operating procedures and hazard and safety requirements		

WA0403	Following relevant legislative and regulatory requirements and standard operating procedures to work practices		
WA0404	Using measurement for installing and testing electrical wiring and circuits		
WA0405	Checking materials for conformance to specification		
WA0406	Selecting cables		
WA0407	Installing cables/wires/conduit/enclosures and support systems		
WA0408	Marking and labelling cabling for identification		
WA0409	Testing wiring/systems and enclosures for compliance with specifications, relevant regulatory and legislative requirements		
WA0410	Energising and testing installation		
WA0411	Identifying and rectifying faults		
WA0412	Completing reports and documentation using short descriptions, comments and relevant terminology		
WA0413	Considering potential points of danger when planning a rescue or provision of assistance		
WA0414	Isolating electrical hazards in accordance with safety procedures		
WE5	Enter and change programmable controller operational parameters	Date	Signature
Look for evidence that confirms skills in:			
WA0501	Selecting appropriate data transfer device(s)/procedure(s) and transferring the software accurately		

WA0502	Verifying machine operation or process output		
WA0503	Obtaining specific changes required to operating parameters within the software program		
WA0504	Adjusting/changing operational parameters		
WA0505	Checking machine operation or process output		
WA0506	Reporting		
WA0507	Identifying problems		
WA0508	Reading, interpreting and following information on written job instructions, specifications, standard operating procedures, charts, lists, drawings and other applicable reference documents		
WA0509	Planning and sequencing operations		
WA0510	Checking and clarifying task related information		
WA0511	Checking for conformance to specifications		
WA0512	Undertaking numerical operations, geometry and calculations/formulae within the scope of this unit		
WE6	Terminate and connect specialist cables	Date	Signature
Look for evidence that confirms skills in:			
WA0601	Checking cables and materials for condition and conformance to specifications		
WA0602	Obtaining and interpreting appropriate documentation		

WA0603	Making terminations/connections to specification, manufacturer and regulatory requirements		
WA0604	Testing cabling, connections and terminations		
WA0605	Marking, tagging and labelling cables, wires, conductors and connections		
WA0606	Entering information onto documentation related to termination and connection of specialist cables		
WA0607	Applying measurement skills needed to meet the requirements of this unit		
WE7	Perform electrical/electronic measurement	Date	Signature
Look for evidence that confirms skills in:			
WA0701	Setting and using electro-measuring devices		
WA0702	Obtaining and interpreting specified electrical measurements		
WA0703	Selecting appropriate measuring devices		
WA0704	Performing arithmetic operations required to convert measurements into appropriate units of measurement		
WA0705	Maintaining and storing electro-measuring devices		
WA0706	Reading and interpreting information on standard operating procedures		
WE8	Perform precision electrical/electronic measurement	Date	Signature
Look for evidence that confirms skills in:			
WA0801	Interpreting drawings, specifications, data sheets and instructions		

WA0802	Taking measurements using precision electrical/ electronic measuring devices		
WA0803	Interpreting measurements for a range of precision electrical/electronic measuring devices		
WA0804	Setting and adjusting precision electrical/electronic measuring devices		
WA0805	Maintaining and storing precision electrical/electronic measuring devices		
WE9	Perform engineering measurements	Date	Signature
Look for evidence that confirms skills in:			
WA0901	Selecting the appropriate measuring device for given measuring tasks		
WA0902	Using appropriate measuring technique		
WA0903	Reading all measurements taken accurately to the finest graduation of the selected measuring device		
WA0904	Handling and storing measuring devices in accordance with manufacturers' specifications or standard operating procedures		
WA0905	Verifying all measuring devices before use		
WA0906	Making, where appropriate, routine adjustments to measuring devices		
WA0907	Reading, interpreting and following information on written job instructions, specifications, standard operating procedures, charts, lists, drawings and other applicable reference documents		
WA0908	Planning and sequencing operations		
WA0909	Checking and clarifying task related information		

WA0910	Checking for conformance to specifications		
WA0911	Undertaking numerical operations involving addition, subtraction, multiplication, division, fractions and decimals within the scope of this unit		
WA0912	Preparing drawings as required		
WE10	Use power tools/hand held operations	Date	Signature
Look for evidence that confirms skills in:			
WA1001	Reading and following information on standard operating procedures		
WA1002	Following verbal instructions		
WA1003	Selecting power tools appropriate to the task		
WA1004	Using power tools safely		
WA1005	Using clamping/securing devices		
WA1006	Identifying power tool defects		
WA1007	Maintaining power tools using appropriate techniques		
WA1008	Sharpening tools/tool bits		
WA1009	Storing power tools according to manufacturers'/ standard operating procedures.		
WE11	Fault find/repair electrical equipment/components up to 250 volts single phase supply	Date	Signature

Look for evidence that confirms skills in:			
WA1101	Obtaining circuit diagrams, specifications, schematics		
WA1102	Isolating electrical equipment/component from the power supply		
WA1103	Tagging and checking isolated electrical equipment/component		
WA1104	Locating and reading/recording built-in fault indicators		
WA1105	Checking and testing electrical equipment/component for correct operation		
WA1106	Verifying variations from specifications indicated by initial test results		
WA1107	Identifying and localising faults in electrical equipment/components		
WA1108	Recording/reporting faults in the electrical equipment/components		
WA1109	Repairing, replacing or adjusting electrical equipment/components to specification		
WA1110	Referencing supplier catalogues		
WA1111	Confirming that the electrical equipment/components have been returned to specification		
WA1112	Recording rectification of the electrical equipment/components		
WE12	Fault find/repair electrical equipment/components up to 1000 volts a.c./1500 volts d.c.	Date	Signature
Look for evidence that confirms skills in:			
WA1201	Using diagnostic skills to identify correct and faulty operation		

WA1202	Interpreting and using circuit diagrams, specifications		
WA1203	Isolating electrical equipment/components from the power supply		
WA1204	Tagging isolated electrical equipment/components		
WA1205	Checking electrical equipment/components for isolation from the power supply		
WA1206	Locating and reading/recording built-in fault indicators		
WA1207	Obtaining error code interpretation documents		
WA1208	Checking and testing electrical equipment/components for correct operation		
WA1209	Verifying variations from specifications indicated by initial test results		
WA1210	Identifying and localising faults in electrical equipment/components		
WA1211	Recording/reporting faults in electrical equipment/components		
WA1212	Repairing, replacing or adjusting electrical equipment/components to specification		
WA1213	Referencing supplier catalogues		
WA1214	Using test instruments to confirm that electrical equipment/components are operating to specification		
WA1215	Recording rectification of the electrical equipment/components		
WE13	Diagnose and maintain electronic controlling systems on mobile plant	Date	Signature

Look for evidence that confirms skills in:			
WA1301	Identifying the control unit		
WA1302	Using fault codes correctly to access fault codes with indicators, meters or diagnostic tooling		
WA1303	Interpreting fault codes and specifications correctly from applicable manuals		
WA1304	Clearing fault codes from memory and verifying using applicable procedures and manuals		
WA1305	Identifying and applying procedures to safeguard electronic components and systems when diagnosing and maintaining typical mobile plant electronic circuits		
WA1306	Locating and identifying various types of input and output components		
WA1307	Following manufactures' procedures to test output components		
WA1308	Identifying, removing, replacing component parts		
WA1309	Making adjustments in relation to mechanical clearances and measured electrical and resistance values		
WA1310	Selecting tooling (software/hardware) according to manufactures' manual		
WA1311	Obtaining security codes using correct protocol from manufacturer, plant/equipment identification and appropriate identification		
WA1312	Using computer and relevant computer applications including downloading and entering data for new specifications as per manufacturers' procedures		
WE14	Fault find and repair/rectify basic electrical circuits	Date	Signature
Look for evidence that confirms skills in:			

WA1401	Using diagnostic skills to identify correct and faulty operation		
WA1402	Interpreting and using circuit diagrams, specifications		
WA1403	Locating reading/recording built-in fault indicators		
WA1404	Obtaining error code interpretation documents		
WA1405	Isolating electrical circuits from the power supply		
WA1406	Tagging isolated circuits		
WA1407	Verifying circuit isolation		
WA1408	Confirming/localising circuit faults using appropriate test equipment, work techniques and tools		
WA1409	Recording/reporting faults in electrical circuits		
WA1410	Repairing/adjusting electric circuits		
WA1411	Confirming circuit/s against specification		
WA1412	Recording rectification of the circuit(s)		
WE15	Disconnect/reconnect fixed wired equipment up to 1000 volts a.c./1500 volts d.c.	Date	Signature
Look for evidence that confirms skills in:			
WA1501	Determining and recording equipment characteristics and isolation points from relevant circuit diagrams, specifications, schematics of fixed wired equipment		

WA1502	Isolating fixed wired equipment		
WA1503	Using lock-off equipment and tags/signs		
WA1504	Proving electrical isolation		
WA1505	Labelling conductors and recording their layout		
WA1506	Disconnecting conductors		
WA1507	Making safe disconnected cables/connections		
WA1508	Checking circuits for safe isolation prior to reconnecting		
WA1509	Checking connections and preparing conductors for termination		
WA1510	Checking continuity of the protective earth conductor to determine whether it is sufficiently low		
WA1511	Testing the resistance between the protective earth conductor and the neutral conductor to determine whether it is sufficiently low - not greater than 2 Ohms		
WA1512	Testing the insulation resistance of active conductors to confirm that it is greater than 1 Megohm		
WA1513	Connecting conductors to equipment		
WA1514	Fastening/sealing cables/wires/conduits to specifications		
WA1515	Removing lock-off equipment and signage		
WA1516	Checking and testing equipment and circuits for conformance to specifications		

WE16	Fault find and repair/rectify complex electrical circuits	Date	Signature
Look for evidence that confirms skills in:			
WA1601	Using diagnostic skills to identify correct and faulty operation		
WA1602	Interpreting and using circuit diagrams, specifications		
WA1603	Locating reading/recording built-in fault indicators		
WA1604	Obtaining error code interpretation documents		
WA1605	Isolating electrical circuits from the power supply		
WA1606	Tagging isolated circuits		
WA1607	Verifying circuit isolation		
WA1608	Confirming/localising circuit faults using appropriate test equipment, work techniques and tools		
WA1609	Recording/reporting faults in electrical circuits		
WA1610	Repairing/adjusting electric circuits		
WA1611	Confirming circuit/s against specification		
WA1612	Recording rectification of the circuit(s)		
WE17	Maintain fluid power systems for mobile plant	Date	Signature

Look for evidence that confirms skills in:			
WA1701	Determining and recording equipment characteristics and isolation points from relevant circuit diagrams, specifications, schematics of fixed wired equipment		
WA1702	Isolating fixed wired equipment		
WA1703	Using lock-off equipment and tags/signs		
WA1704	Proving electrical isolation		
WA1705	Labelling conductors and recording their layout		
WA1706	Disconnecting conductors		
WA1707	Making safe disconnected cables/connections		
WA1708	Checking circuits for safe isolation prior to reconnecting		
WA1709	Checking connections and preparing conductors for termination		
WA1710	Checking continuity of the protective earth conductor to determine whether it is sufficiently low		
WA1711	Testing the resistance between the protective earth conductor and the neutral conductor to determine whether it is sufficiently low - not greater than 2 Ohms		
WA1712	Testing the insulation resistance of active conductors to confirm that it is greater than 1 Megohm		
WA1713	Connecting conductors to equipment		

WA1714	Fastening/sealing cables/wires/conduits to specifications		
WA1715	Removing lock-off equipment and signage		
WA1716	Checking and testing equipment and circuits for conformance to specifications		
WE18	Fault find, test and calibrate instrumentation systems and equipment	Date	Signature
Look for evidence that confirms skills in:			
WA1801	Obtaining relevant data with respect to the operation of the instrumentation systems/equipment		
WA1802	Locating, inspecting and testing a range of instrumentation system components		
WA1803	Isolating instrumentation system/equipment		
WA1804	Interpreting all relevant instrumentation circuits, drawings, instructions, manuals and data sheets		
WA1805	Checking the individual components within the instrumentation system for correct operation		
WA1806	Dismantling, repairing and reassembling faulty components		
WA1807	Selecting correct replacement parts from the manufacturer/supplier catalogues		
WA1808	Checking repaired/replaced instrumentation system components for correct operation		
WA1809	Complete service reports, and language and literacy skills for recording/documenting test results		
WA1810	Checking and verifying the operational functions of the instrumentation system/equipment including reading/recording built-in indicators		

WA1811	Obtaining error code interpretation documents		
WA1812	Undertaking zero, span and range checks on instrumentation systems/equipment		
WA1813	Calibrating instrumentation system/equipment		
WE19	Dismantle, replace and assemble engineering components	Date	Signature
Look for evidence that confirms skills in:			
WA1901	Obtaining and interpreting all relevant instructions, standard operating procedures, drawings and specifications		
WA1902	Preparing component for dismantling		
WA1903	Dismantling components using appropriate techniques, tools and equipment		
WA1904	Marking component parts appropriately for identification purposes		
WA1905	Checking components visually and dimensionally for conformance to specification		
WA1906	Where appropriate, marking faulty parts for repair, replacement or adjustment		
WA1907	Selecting and confirming replacement parts to specifications		
WA1908	Obtaining and using all relevant supplier catalogues		
WA1909	Preparing and assembling components using appropriate techniques in accordance with standard operating procedures		

WA1910	Where appropriate, applying lubricants correctly to the assembly in accordance with specifications and standard operating procedures		
WA1911	Where appropriate, applying packing and/or sealing materials in accordance with specifications and standard operating procedures		
WA1912	Inspecting and checking the final assembly for conformance to specification		
WA1913	Where appropriate, returning the final assembly to use		
WE20	Diagnose and repair analog equipment and components	Date	Signature
Look for evidence that confirms skills in:			
WA2001	Obtaining and following relevant circuit diagrams, manuals, specifications, schematics, maintenance records, supplier catalogues, etc.		
WA2002	Locating, reading/recording and diagnosing built-in fault indicators		
WA2003	Obtaining error code interpretation documents		
WA2004	Running test functions and recording faults and/or equipment status indicated by built-in test functions/displays		
WA2005	Checking electronic equipment/sub-assemblies, components, connections and terminations for conformance to specifications		
WA2006	Removing and replacing/repairing faulty components from the electronic equipment		
WA2007	Recording results of tests undertaken on electronic equipment		
WA2008	Isolating electronic sub-assembly from the power supply		

WA2009	Adjusting/tuning and calibrating electronic equipment/sub-assemblies		
WA2010	Returning to service and testing to specification the repaired electronic equipment/sub-assembly		
WA2011	Using language and literacy skills to provide brief reports/records/results of tests		
WA2012	Reproducing fault symptoms in the electronic equipment and verifying faults using appropriate test equipment and fault finding techniques		
WA2013	Refitting repaired/replaced components into the sub-assembly		
WE21	Maintain/service analog/digital electronic equipment	Date	Signature
Look for evidence that confirms skills in:			
WA2101	Following relevant circuit diagrams, manuals, specifications, schematics, maintenance records, supplier catalogues etc.		
WA2102	Locating and reading/recording built-in fault indicators		
WA2103	Obtaining error code interpretation documents		
WA2104	Running test functions and recording faults and/or equipment status indicated by built-in test functions/displays		
WA2105	Checking electronic equipment/sub-assemblies, components, connections and terminations for conformance to specifications		
WA2106	Removing and replacing components from the electronic equipment		
WA2107	Isolating electronic sub-assembly from the power supply		

WA2108	Adjusting/tuning and calibrating electronic equipment/sub-assemblies		
WA2109	Returning to service and specification of electronic equipment/sub-assembly		
WA2110	Recording test results		
WE22	Modify electronic equipment	Date	Signature
Look for evidence that confirms skills in:			
WA2201	Obtaining relevant circuit diagrams, schematics, manuals		
WA2202	Isolating, tagging and verifying isolated equipment		
WA2203	Removing and refitting sub-assembly/equipment from the system		
WA2204	Carrying out modifications to specification		
WA2205	Amending circuit diagrams, schematics, equipment manuals, specifications affected by the modifications		
WA2206	Recommissioning electronic equipment		
WA2207	Testing, checking modified electronic equipment to ensure conformance to specifications		
WA2208	Entering routine and familiar information onto pro-forma and standard workplace forms		
WA2209	Locating, reading and interpreting information on written job instructions, specifications, drawings, charts, lists and other reference documentation		
WE23	Maintain, repair control instrumentation - single and multiple loop control systems	Date	Signature

Look for evidence that confirms skills in:			
WA2301	Obtaining and interpreting relevant engineering specifications, technical information, software data, diagrams and drawings, historical records and documents pertaining to the system components and operational data		
WA2302	Consulting system operators and other relevant plant personnel with respect to the control loop characteristics		
WA2303	Confirming function/malfunction of the system and/or its components		
WA2304	Checking operational characteristics of control devices, signal conversion instruments and final control elements for conformance to specification		
WA2305	Identifying faults/defects in control system components		
WA2306	Locating/reading in-built fault indicators and error codes		
WA2307	Obtaining relevant pneumatic, electrical and electronic circuit diagrams		
WA2308	Testing and monitoring the control loop for correct operation		
WA2309	Monitoring and recording responses of the control system		
WA2310	Using appropriate fault-finding and diagnostic techniques and procedures throughout the monitoring and testing process		
WA2311	Comparing collected data with the operational specifications of the control system		
WA2312	Marking components for repair or replacement		

WA2313	Dismantling/disassembling serviceable items		
WA2314	Setting up appropriate test and calibration equipment		
WA2315	Setting and adjusting the controller modes		
WA2316	Checking the control instrumentation for correct zero, span and range		
WA2317	Adjusting the control system as required		
WA2318	Completing all necessary reports including appropriate follow-up procedures		
WA2319	Commissioning the control system		
WA2320	Interpreting trends from operational data		
WA2321	Interpreting information from in-built devices		
WA2322	Calculating control loop characteristics		
WE24	Install, maintain and calibrate instrumentation sensors, transmitters and final control elements	Date	Signature
Look for evidence that confirms skills in:			
WA2401	Accessing relevant data sheets, circuit diagrams, engineering drawings, instructions, specifications, information and supplier catalogues and replacement components		
WA2402	Selecting sensors, transmitters and final control elements		

WA2403	Installing and testing sensors, transmitters and final control elements to specification		
WA2404	Obtaining and performing relevant scheduled/preventative maintenance schedules for sensors, transmitters and final control elements		
WA2405	Determining correct function of sensors, transmitters and final control elements		
WA2406	Recording test results		
WA2407	Identifying, localising, monitoring and reporting/recording faults in sensors, transmitters and final control elements		
WA2408	Preparing sequential action plan to correct faults in sensors, transmitters and final control elements		
WA2409	Applying procedures to sequential and loop testing		
WA2410	Checking sensors, transmitters and final control elements and marking for replacement, repair or overhaul		
WA2411	Repairing/overhauling faulty items for fitting and /or refitting		
WA2412	Fitting/ refitting sensors, transmitters and final control elements		
WA2413	Preparing fitted/refitted sensors, transmitters and final control elements for testing and calibration		
WA2414	Configuring, calibrating, testing, adjusting, tuning and validating system performance		
WE25	Terminate signal and data cables	Date	Signature
WA2501	Identifying cables and conductors		
WA2502	Labelling cables and conductors		

WA2503	Obtaining relevant instructions, specifications and data sheets		
WA2504	Preparing cable ends for termination		
WA2505	Following specifications		
WA2506	Testing completed terminations for compliance to specifications		
WA2507	Fixing/securing cables		
WE26	Maintain instrumentation system components	Date	Signature
Look for evidence that confirms skills in:			
WA2601	Obtaining relevant data with respect to the operation of the instrumentation systems/equipment		
WA2602	Locating, inspecting and testing a range of instrumentation system components		
WA2603	Isolating instrumentation system/equipment		
WA2604	Obtaining and interpreting all relevant instrumentation circuits, drawings, instructions, manuals and data sheets		
WA2605	Checking the individual components within the instrumentation system for correct operation		
WA2606	Dismantling/repairing/reassembling faulty components		
WA2607	Selecting correct replacement parts from the manufacturer/supplier catalogues		
WA2608	Checking repaired/replaced instrumentation system components for correct operation		

WA2609	Completing service reports		
WA2610	Obtaining error code interpretation documents		
WA2611	Recording/documenting test results		
WA2612	Undertaking zero, span and range checks on instrumentation systems/equipment		
WA2613	Calibrating instrumentation system/equipment		
WE27	Diagnose and repair digital equipment and components	Date	Signature
Look for evidence that confirms skills in:			
WA2701	Obtaining relevant circuit diagrams, manuals, schematics, specifications, maintenance records, supplier catalogues		
WA2702	Locating, reading/recording and diagnosing built-in fault indicators		
WA2703	Obtaining error code interpretation documents		
WA2704	Running test functions and recording faults and/or equipment status indicated by built-in test functions/displays		
WA2705	Checking electronic equipment/sub-assemblies, components, connections and terminations for conformance to specifications		
WA2706	Removing and replacing/repairing faulty components from the electronic equipment		
WA2707	Recording results tests on electronic equipment		

WA2708	Isolating electronic sub-assembly from the power supply		
WA2709	Adjusting/tuning and calibrating electronic equipment/sub-assemblies		
WA2710	Returning to service and testing to specification the repaired electronic equipment/sub-assembly		
WA2711	Reporting/recording return to service		
WA2712	Reproducing fault symptoms in the electronic equipment and verifying faults using appropriate test equipment and fault finding techniques		
WA2713	Refitting repaired/replaced components into the sub-assembly		
WE28	Apply principles of occupational health and safety in the work environment	Date	Signature
Look for evidence that confirms skills in:			
WA2801	Following safe working practices		
WA2802	Maintaining a safe and clean condition workplace		
WA2803	Carrying out workplace activities such as working safely, not endangering others, following company and legislative requirements, following procedures		
WA2804	Selecting, wearing and storing appropriate personal protective equipment		
WA2805	Using appropriate safety equipment and devices		
WA2806	Carrying out work with the information given by safety signs and symbols		

WA2807	Carrying out manual handling principles		
WA2808	Using emergency equipment correctly		
WA2809	Noting workplace hazards		
WA2810	Contacting appropriate personnel and emergency services in the event of an accident		
WA2811	Following emergency and evacuation procedures		
WA2812	Communicating and interpreting information appropriate to OH&S within the scope of this unit		
WA2813	Checking and clarifying task-related information		
WA2814	Communicating with emergency personnel		
WA2815	Checking for conformance to specifications		