

# Maintenance and Operations Engineering Technician (AP V1.4)

## Level 3 Apprenticeship Standard (ST0154)

### Specification



This guide describes the different types of End-Point Assessment tests, the test rules and who should be involved. Preparing for End-Point Assessment and working with SIAS are also covered.

SIAS is the science industry assessment service. It is part of the Cogent Skills Group. For further information about apprenticeship standards and Trailblazers please contact [info@siasuk.com](mailto:info@siasuk.com).

#### Version History

Version	Updates
1.0	This document relates to Level 3 Maintenance and Operations Engineering Technician Assessment Plan V1.4

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## Objective

The aim of this End-Point Assessment (EPA) is to ensure that the apprentice is occupationally competent against the knowledge, skills and behaviours outlined in the assessment plan for this standard.

Maintenance and operations engineering technician covers 7 roles:

- Electrical Technicians
- Mechanical Technicians
- Control and Instrumentation Technicians
- Wind Turbine Technicians
- Electrical System and Process Control Technicians
- Electromechanical Technicians
- Plant Operations Technicians.

They will maintain the safety, integrity and effective operation of plant and equipment in one or more of the following Industries:

- the electricity generating environment, which may use a range of different fuels including coal, gas, nuclear, wind and other renewable sources.
- telecommunications power plants
- oil and gas refining; nuclear waste reprocessing
- processing and production of chemicals
- pharmaceuticals
- human and animal food
- cosmetics
- petrochemicals
- sewerage
- exploration and exploitation of oil and gas.

Electrical, mechanical, control and instrumentation, electrical system and process control, electromechanical and wind turbine technicians will undertake installation, testing, servicing, removal, replacement, maintenance and repair of a range of equipment, sometimes complex, as part of planned preventative and reactive maintenance programmes. They may also undertake decommissioning activities when plant is being removed from service. Plant operation technicians will undertake the safe and efficient operation of complex integrated energy conversion and production plant and systems. These activities could include plant commissioning, isolation and testing, plant preparation, plant start-up and shut down, monitoring and controlling plant and dealing with critical operational problems. Technicians will be responsible for the quality of their own work, possibly others' and ensuring the work is completed safely, meets stakeholder quality, time and budget requirements, whilst maintaining the efficient running of plant and equipment.

## Prior Learning and Qualifications

Typically, 3 GCSEs at grade C or higher including mathematics, English and science, or equivalent or relevant experience.

## Overview

The Maintenance and operations engineering technician apprenticeship will typically take 36 - 42 months depending on the availability of assets and activities, with the end-point assessment taken in the last 6 months. Performance in the end-point assessment will determine the grade awarded: distinction, merit, pass or fail.

## Competence Evaluation

During the apprenticeship, regular evaluation of the competence of the apprentice against the apprenticeship standard will help to ensure that they achieve full occupational competence by the end of their training, and they are ready for EPA. Confirmation from the employer that the apprentice is fully competent is needed before EPA can take place.

As competence evaluation is an in-programme activity, the process that is used for this has not been mandated. It is for the employer supported by their training provider to decide how they wish to do this. To help with this SIAS has produced the SIAS Competence Tracker.

## Gateway Requirements

Employers must satisfy themselves that apprentices are ready for their End-Point Assessment. Apprentices must demonstrate that they meet the following criteria:

- achieved a minimum level 2 English and mathematics in line with the apprenticeship funding rules
- satisfactory completion of the formal training plan agreed with the apprentice by the employer
- sufficient evidence in the form of a portfolio to allow the apprentice to consistently demonstrate knowledge, skills and behaviours as described in the standard.

Although the apprentice should only be recommended for End-Point Assessment when they are ready, employers should have a remediation process in place to support any apprentice who fails to meet the conditions of the End-Point Assessment.

## Assessment Methods

This standard uses the following assessment methods and should be undertaken in this order:

- Knowledge Assessment (weighting 20%)
- Practical Observation (weighting 40%)
- Technical Interview, based upon an evidence portfolio which will include all evidence of practical observations, progress reviews and work activities (weighting 40%)

### Assessment Method 1: Knowledge Assessment

Apprentices will be required to complete a standardised knowledge assessment consisting of 30 multiple choice questions, which may be scenario based, to be taken under examination conditions. The assessment will be a 45minute electronic or paper-based question paper and will enable apprentices to demonstrate core technical knowledge across the Maintenance and Operations Engineering Technician standard. The questions will be determined and standardised by SIAS in consultation with representative employers. The apprentice will take

the knowledge assessment in a suitably controlled environment in the workplace in the presence of an invigilator. The invigilator may be sourced from the employer but will be approved by SIAS and must operate according to their guidance. The test will be marked by an independent examiner appointed by SIAS, following a marking guide produced by SIAS. Independent examiners must be competent to a minimum of level 4 or equivalent in a relevant engineering discipline with a minimum 3 years' post qualification experience. The knowledge assessment will be marked out of 100 marks, the score will provide points towards the final grade reflecting the weighting for this assessment method.

### Knowledge Test Grading Boundaries

Knowledge Assessment %	Points	Grade
≤ 59 (17 marks)	0	Fail
60-74 (18 – 22 marks)	1.5	Pass
75-84 (23 – 25 marks)	3	Merit
85-100 (26 – 30 marks)	4.5	Distinction

### Knowledge Test Knowledge, Skills and Behaviours

Ref	Grading descriptor
<b>Knowledge</b>	
<b>K1</b>	First principles relating to the operation and maintenance of appropriate plant and equipment
<b>K2</b>	Relevant industry health and safety standards, regulations, and environmental and regulatory requirements
<b>K3</b>	Maintenance and operational practices, processes and procedures covering a range of plant and equipment
<b>K4</b>	The relevant engineering theories and principles relative to their occupation

### Assessment Method 2: Practical Observation

Apprentices will complete a practical observation. The content of this practical observation will relate to the specific role they are working towards. The duration of this activity will typically be no longer than one day and the actual time allowed will be based on the comparable time that an industry competent worker would take to achieve successful task(s) completion; thus SIAS will set the time allowed for observations in consultation with representative employers.

The observation will be managed and marked by an independent technical expert appointed by SIAS, which may or may not be one of the independent technical experts who conducts the technical interview.

The apprentice will be asked standardised questions from a set developed by SIAS with opportunity for follow up questions as appropriate, to confirm their understanding of the rationale for actions taken and the choices made to complete the tasks. SIAS will provide a standard template upon which to record the assessment outcomes.

This observation will provide the opportunity for the apprentice to synoptically demonstrate core and specific knowledge, skills and behaviours on actual plant and equipment in a realistic work situation. This will offer the opportunity to bring together and apply their learning. Apprentices will be assessed to confirm that they can apply their knowledge of plant and systems to safely perform maintenance and operational activities with minimum supervision.

The observation will be marked out of 100 marks, the score will provide points towards the final grade reflecting the weighting for this assessment method.

### Practical Observation Grading Descriptors

Pass	Merit	Distinction
<b>P1</b> Achieves practical activities as described above and meets the expectations of technical experts	<b>M1</b> Works with others to identify areas for improvement and follows through on agreed implementation	<b>D1</b> Exemplary health and safety performance.
<b>P2</b> Follows policies and procedures; applies health and safety knowledge. Takes personal responsibility for own health, safety, and security and that of anyone who may be affected by their actions	<b>M2</b> Demonstrates positive professional relationships with individuals to support specific issues	<b>D2</b> Identifies health and safety deficiency and provides solutions
<b>P3</b> Accuracy and finish of work meets company standards	<b>M3</b> Adapts the method and style of communications to changing circumstances and needs.	<b>D3</b> Consults and involves, people from team and other areas to achieve greater understanding
<b>P4</b> Effectively contributes to team success, and suggests valid ideas	<b>M4</b> Consistently demonstrates compliance and makes suggestions to reduce risks	<b>D4</b> Takes additional responsibility and autonomy to achieve high performance outcomes
<b>P5</b> Speaks confidently when asked, listens to others, and takes required action		<b>D5</b> Through positive relationships is able to actively address conflict with positive outcomes
<b>P6</b> Demonstrates consistent application of policies and procedures		<b>D6</b> Pre-empt risks prior to task commencement and puts actions in place to prevent them occurring
<b>P7</b> Consistently demonstrates compliance		



Pass	Merit	Distinction
and proactively identifies workplace hazards		

Fail – An apprentice will fail where they do not demonstrate all the pass descriptors.

### Practical Observation Knowledge, Skills and Behaviours

Ref	Grading descriptor
<b>Skills</b>	
<b>S1</b>	Comply with industry health, safety and environmental working practices and regulations
<b>S2</b>	Locate, and rectify faults on plant and equipment
<b>S3</b>	Communicate with and provide information to stakeholders in line with personal role and responsibilities
<b>S4</b>	Read, understand and interpret information and work in compliance with technical specifications and supporting documentation
<b>S5</b>	Prepare work areas to undertake work related activities and reinstate those areas after the completion of the work-related activities
<b>S6</b>	Inspect and maintain appropriate plant and equipment to meet operational requirements
<b>S7</b>	Assess and test the performance and condition of plant and equipment
<b>S8</b>	Communicate, handover and confirm that the appropriate engineering process has been completed to specification
<b>Behaviours</b>	
<b>B1</b>	Health and Safety – follows health and safety policies and procedures and be prepared to challenge unsafe behaviour using appropriate techniques to ensure the protection of people and property when working alone and/or with appropriate supervision
<b>B2</b>	Quality focused – ensures that work achieves quality standard both occupationally and personally
<b>B3</b>	Working with others – has the ability to work well with people from different disciplines, backgrounds and expertise to accomplish an activity safely and on time
<b>B4</b>	Interpersonal skills – gets along well with others and takes into account their needs and concerns
<b>B6</b>	Sustainability and ethical behaviour – behaves ethically and undertakes work in a way that contributes to sustainable development
<b>B7</b>	Risk awareness – demonstrates high concentration, the desire to reduce risks, ability to be compliant and awareness of change, through regular monitoring and checking of information



<b>As part of the practical observation of skills, apprentices can expect to be assessed on one of the specific skill requirements for their role as detailed below.</b>	
<b>Control and Instrumentation Technicians</b>	
<b>SS1</b>	Position, assemble, install and dismantle plant and equipment to agreed specifications
<b>SS2</b>	Carry out planned, unplanned and preventative maintenance procedures on plant and equipment
<b>SS3</b>	Replace, repair and/or remove components in plant and equipment and ensure its return to operational condition
<b>SS4</b>	Diagnose and determine the cause of faults in plant and equipment
<b>SS5</b>	Calibrate and configure instrument and control systems
<b>Electrical Systems and Process Control Technicians</b>	
<b>SS1</b>	Position, assemble, install and dismantle integrated electrical apparatus, systems and process control equipment
<b>SS2</b>	Carry out planned, unplanned and preventative maintenance procedures on integrated plant and equipment
<b>SS3</b>	Replace, repair and/or remove components within integrated plant and equipment and ensure its return to operational condition
<b>SS4</b>	Diagnose and determine the cause of faults within integrated plant and equipment
<b>SS5</b>	Calibrate and configure integrated electrical apparatus, systems and process control equipment
<b>Electrical Technicians</b>	
<b>SS1</b>	Position, assemble, install and dismantle electrical plant and equipment to agreed specifications
<b>SS2</b>	Carry out planned, unplanned and preventative maintenance procedures on electrical plant and equipment
<b>SS3</b>	Replace, repair and/or remove components in electrical plant and equipment and ensure its return to operational condition
<b>SS4</b>	Diagnose and determine the cause of faults in electrical plant and equipment
<b>Electromechanical Technicians</b>	
<b>SS1</b>	Position, assemble, install and dismantle integrated electromechanical power and control systems
<b>SS2</b>	Carry out planned, unplanned and preventative maintenance procedures on integrated plant and equipment
<b>SS3</b>	Replace, repair and/or remove components within integrated plant and equipment and ensure its return to operational condition

<b>SS4</b>	Diagnose and determine the cause of faults within integrated plant and equipment
<b>Mechanical Technicians</b>	
<b>SS1</b>	Position, assemble, install and dismantle mechanical plant and equipment to agreed specifications
<b>SS2</b>	Carry out planned, unplanned and preventative maintenance procedures on mechanical plant and equipment
<b>SS3</b>	Replace, repair and/or remove components in mechanical plant and equipment and ensure its return to operational condition
<b>SS4</b>	Diagnose and determine the cause of faults in mechanical plant and equipment
<b>Plant Operations Technicians</b>	
<b>SS1</b>	Carry out planned operating procedures on plant and equipment
<b>SS2</b>	Monitor the performance of the plant and equipment
<b>SS3</b>	Handover and accept responsibility for plant and equipment
<b>Wind Turbines Technicians</b>	
<b>SS1</b>	Install, assemble, commission and dismantle wind turbine plant and equipment, which will include pitch systems, yaw systems, switchgear, control systems to agreed specifications
<b>SS2</b>	Carry out planned, unplanned and preventative maintenance procedures on wind turbine plant and equipment including mechanical drive systems
<b>SS3</b>	Replace, repair and/or remove components in wind turbine plant and equipment and ensure its return to operational condition
<b>SS4</b>	Diagnose and determine the cause of faults in wind turbine plant and equipment

On completion of the assessment, the accumulated marks will be added up and points awarded towards the final grade.

<b>Practical Observation Grade</b>	<b>Points</b>
Fail	0
Pass	3.5
Merit	7
Distinction	10.5

### Assessment Method 3: Technical Interview

As the final stage of the end-point assessment process, an independent technical expert will conduct a technical interview.

This interview will be based on the contents of the evidence portfolio, which may be compiled throughout the apprenticeship and finalised during the End-Point Assessment period. The

evidence will be sufficient to demonstrate the apprentice can apply knowledge, skills and behaviours required.

The apprentice’s manager or mentor will typically support the development of the evidence portfolio in accordance with company policy and procedures, although SIAS will provide guidance on the content of the evidence portfolio.

The technical interview will test the currency, validity and coverage of the evidence presented in the evidence portfolio in relation to the knowledge, skills and behaviours.

The technical interview will test the currency, validity and coverage of the evidence presented in the evidence portfolio in relation to the knowledge, skills and behaviours shown in Annex A. It will consist of three scenario question areas synoptically examining knowledge, skills and behaviours. It will typically last two hours and a maximum of two and a half hours. The technical expert will use standardised questions from an agreed set of questions developed by SIAS. Follow-up questions may be used to probe further into the detail in order to satisfy themselves of the depth of knowledge and skills. This interview will be conducted under controlled conditions. The apprentice responses will be documented by the independent technical expert.

The apprentice may choose to end the assessment method early. The apprentice must be confident they have demonstrated competence against the assessment requirements for the assessment method. The independent assessor or SIAS must ensure the apprentice is fully aware of all assessment requirements. The end-point assessor or SIAS cannot suggest or choose to end the assessment methods early, unless in an emergency. SIAS is responsible for ensuring the apprentice understands the implications of ending an assessment early if they choose to do so. The end-point assessor may suggest the assessment continues. The end-point assessor must document the apprentice’s request to end the assessment early.

The technical interview will be marked out of 100 marks, the score will provide points towards the final grade reflecting the weighting for this assessment method.

### Technical Interview Grading Descriptors

Pass	Merit	Distinction
<b>P1</b> Provides correct information to describe their understanding of skills, knowledge and behaviours required to undertake their respective role competently and meeting technical experts’ requirements.	<b>M1</b> Explains in detail, with supporting evidence, the range of required skills, knowledge, and behaviours with particular emphasis on inclusion of the relevant engineering theories and principles relative to their occupation	<b>D1</b> Justification of maintenance and operational practices, processes and procedures covering a range of plant and equipment
<b>P2</b> Understands and can describe the impact of their actions on plant, equipment, and others	<b>M2</b> Explains in detail, with supporting evidence, the range of required skills, knowledge, and behaviours	<b>D2</b> Justification of a range of methods to locate, and rectify faults on plant and equipment, with

Pass	Merit	Distinction
	with particular emphasis on demonstration of review and applicability of industry health, safety and environmental working practices and regulations	explanation of their recommended choice
<b>P3</b> Demonstrates compliance with all company health, safety and environmental processes and policies as well as regulatory requirements		<b>D3</b> Demonstration of excellent and thorough understanding of the relevant engineering theories and principles relative to their occupation
<b>P4</b> Describes why policies and procedures are required		<b>D4</b> Excellent knowledge and understanding of the impact of relevant industry health, safety and environmental working practices and regulations on their activities

Fail – An apprentice will fail where they do not demonstrate all the pass descriptors.

### Technical Interview Knowledge, Skills and Behaviours

Ref	Grading descriptor
<b>Knowledge</b>	
<b>K1</b>	First principles relating to the operation and maintenance of appropriate plant and equipment
<b>K2</b>	Relevant industry health and safety standards, regulations, and environmental and regulatory requirements
<b>K3</b>	Maintenance and operational practices, processes and procedures covering a range of plant and equipment
<b>K4</b>	The relevant engineering theories and principles relative to their occupation
<b>Skills</b>	
<b>S2</b>	Locate, and rectify faults on plant and equipment
<b>S4</b>	Read, understand and interpret information and work in compliance with technical specifications and supporting documentation
<b>S6</b>	Inspect and maintain appropriate plant and equipment to meet operational requirements
<b>S8</b>	Communicate, handover and confirm that the appropriate engineering process has been completed to specification

Control and Instrumentation Technicians	
<b>SS1</b>	Position, assemble, install and dismantle plant and equipment to agreed specifications
<b>SS2</b>	Carry out planned, unplanned and preventative maintenance procedures on plant and equipment
<b>SS3</b>	Replace, repair and/or remove components in plant and equipment and ensure its return to operational condition
<b>SS4</b>	Diagnose and determine the cause of faults in plant and equipment
<b>SS5</b>	Calibrate and configure instrument and control systems
Electrical Systems and Process Control Technicians	
<b>SS1</b>	Position, assemble, install and dismantle integrated electrical apparatus, systems and process control equipment
<b>SS2</b>	Carry out planned, unplanned and preventative maintenance procedures on integrated plant and equipment
<b>SS3</b>	Replace, repair and/or remove components within integrated plant and equipment and ensure its return to operational condition
<b>SS4</b>	Diagnose and determine the cause of faults within integrated plant and equipment
<b>SS5</b>	Calibrate and configure integrated electrical apparatus, systems and process control equipment
Electrical Technicians	
<b>SS1</b>	Position, assemble, install and dismantle electrical plant and equipment to agreed specifications
<b>SS2</b>	Carry out planned, unplanned and preventative maintenance procedures on electrical plant and equipment
<b>SS3</b>	Replace, repair and/or remove components in electrical plant and equipment and ensure its return to operational condition
<b>SS4</b>	Diagnose and determine the cause of faults in electrical plant and equipment
Electromechanical Technicians	
<b>SS1</b>	Position, assemble, install and dismantle integrated electromechanical power and control systems
<b>SS2</b>	Carry out planned, unplanned and preventative maintenance procedures on integrated plant and equipment
<b>SS3</b>	Replace, repair and/or remove components within integrated plant and equipment and ensure its return to operational condition
<b>SS4</b>	Diagnose and determine the cause of faults within integrated plant and equipment

Mechanical Technicians	
<b>SS1</b>	Position, assemble, install and dismantle mechanical plant and equipment to agreed specifications
<b>SS2</b>	Carry out planned, unplanned and preventative maintenance procedures on mechanical plant and equipment
<b>SS3</b>	Replace, repair and/or remove components in mechanical plant and equipment and ensure its return to operational condition
<b>SS4</b>	Diagnose and determine the cause of faults in mechanical plant and equipment
Plant Operations Technicians	
<b>SS1</b>	Carry out planned operating procedures on plant and equipment
<b>SS2</b>	Monitor the performance of the plant and equipment
<b>SS3</b>	Handover and accept responsibility for plant and equipment
<b>SS4</b>	Respond to contingencies
Wind Turbines Technicians	
<b>SS1</b>	Install, assemble, commission and dismantle wind turbine plant and equipment, which will include pitch systems, yaw systems, switchgear, control systems to agreed specifications
<b>SS2</b>	Carry out planned, unplanned and preventative maintenance procedures on wind turbine plant and equipment including mechanical drive systems
<b>SS3</b>	Replace, repair and/or remove components in wind turbine plant and equipment and ensure its return to operational condition
<b>SS4</b>	Diagnose and determine the cause of faults in wind turbine plant and equipment
Behaviours	
<b>B5</b>	Critical reasoning – uses resources, techniques and obtained facts to develop sound solutions while recognising and defining problems

On completion of the assessment, the accumulated marks will be added up and points awarded towards the final grade.

Technical Interview Grade	Points
Fail	0
Pass	3.5
Merit	7
Distinction	10.5

### Final Grade

The apprenticeship will be graded Distinction, Merit, Pass or Fail. The final grade will be determined by collective performance in the three assessment tools in the End-Point Assessment. The weighting of the assessment methods is: 40% on the technical interview, 40% practical observation and 20% on the knowledge assessment. A points system relating to the mark achieved in each assessment tool, will determine if the apprentice has achieved a Distinction, Merit, Pass or Fail and is described below:

**Distinction** – minimum of 24 points (10.5 points in technical interview + 10.5 points in practical observation + 3 points knowledge assessment). An apprentice will only achieve a Distinction if they have performed at Distinction level in both the technical interview and practical observation.

**Merit** – minimum of 15.5 points (7.0 points the technical interview + 7 points in the practical observation + 1.5 points knowledge assessment). An apprentice will only achieve a Merit if they have performed at Merit level in both the technical interview and practical observation.

**Pass** – minimum of 8.5 points (e.g. a minimum of Pass in all 3 elements).

Knowledge Assessment %	Points	Grade	Practical Observation	Points	Practical Observation Grade	Technical Interview	Points	Technical Interview Grade
85-100	4.5	Distinction	85-100	10.5	Distinction	85-100	10.5	Distinction
75-84	3	Merit	75-84	7	Merit	75-84	7	Merit
60-74	1.5	Pass	60-74	3.5	Pass	60-74	3.5	Pass
≤ 59	0	Fail	≤ 59	0	Fail	≤ 59	0	Fail

### Moderation

Assessment organisations will undertake moderation of end-point assessor decisions through observations and examination of documentation on a risk sampling basis. Results cannot be confirmed until moderation has been completed.

### Re-takes and re-sits

Re-takes and re-sits will only be available to apprentices who fail an end-point assessment element(s) they are not offered to apprentices wishing to move from pass to distinction. Apprentices may re-take or re-sit one or more elements within the six-month end-point assessment period. Re-take or re-sits outside of the six-month end-point assessment period would require all elements to be re-assessed. Re-sits or re-takes will not be awarded a grade higher than pass. Apprentices must have a supportive action plan to prepare for the re-take or re-sit. Further re-takes or re-sits would be at the discretion of the employer following a 1:1 review with the apprentice to determine the suitability of the apprentice for further testing.

### Certification

The outcomes from the End-Point Assessment will be reviewed and a grade conferred by SIAS in accordance with SIAS QA procedures, which are available from SIAS. SIAS will notify the employer of the outcome of each of the assessments.



SIAS will apply for the apprentice’s certificate, which will be sent by ESFA. The certificate confirms that the apprentice has passed the End-Point Assessment, has demonstrated full competency across the standard and is job-ready.

### Assessment Specification

The assessment specification can be found in the published assessment plan for the standard. Details of which elements of the apprenticeship standard will be tested by each test are given in the Mapping Knowledge, Skills, and Behaviours section of this guide.

### Mapping of Knowledge, Skills, and Behaviours

Key:	
Knowledge Test	KT
Practical Observation	PO
Technical Interview	TI

Ref	KSB to be assessed	Assessment Method
<b>Core Knowledge</b>		
<b>K1</b>	First principles relating to the operation and maintenance of appropriate plant and equipment	KT / TI
<b>K2</b>	Relevant industry health and safety standards, regulations, and environmental and regulatory requirements	KT / TI
<b>K3</b>	Maintenance and operational practices, processes and procedures covering a range of plant and equipment	KT / TI
<b>K4</b>	The relevant engineering theories and principles relative to their occupation	KT / TI
<b>Core Skills</b>		
<b>S1</b>	Comply with industry health, safety and environmental working practices and regulations.	PO
<b>S2</b>	Locate and rectify faults on plant and equipment.	PO / TI
<b>S3</b>	Communicate with and provide information to stakeholders in line with personal role and responsibilities.	PO
<b>S4</b>	Read, understand and interpret information, and work in compliance with technical specifications and supporting documentation.	PO / TI
<b>S5</b>	Prepare work areas to undertake work related activities and reinstate those areas after the completion of the work-related activities.	PO
<b>S6</b>	Inspect and maintain appropriate plant and equipment to meet operational requirements.	PO / TI

Ref	KSB to be assessed	Assessment Method
<b>S7</b>	Assess and test the performance and condition of plant and equipment.	PO
<b>S8</b>	Communicate, handover and confirm that the appropriate engineering process has been completed to specification.	PO / TI
<b>Specific Skills</b>		
Control and Instrumentation Technicians		
<b>SS1</b>	Position, assemble, install and dismantle plant and equipment to agreed specifications.	PO / TI
<b>SS2</b>	Carry out planned, unplanned and preventative maintenance procedures on plant and equipment.	PO / TI
<b>SS3</b>	Replace, repair and/or remove components in control and instrumentation plant and equipment and ensure its return to operational condition.	PO / TI
<b>SS4</b>	Diagnose and determine the cause of faults in control and instrumentation plant and equipment.	PO / TI
<b>SS5</b>	Calibrate and configure instrument and control systems.	PO / TI
Electrical System and Process Control Technician		
<b>SS1</b>	Position, assemble, install and dismantle integrated electrical apparatus, systems and process control equipment.	PO / TI
<b>SS2</b>	Carry out planned, unplanned and preventative maintenance procedures on integrated plant and equipment.	PO / TI
<b>SS3</b>	Replace, repair and/or remove components within integrated plant and equipment and ensure its return to operational condition.	PO / TI
<b>SS4</b>	Diagnose and determine the cause of faults within integrated plant and equipment.	PO / TI
<b>SS5</b>	Calibrate and configure integrated electrical apparatus, systems and process control equipment.	PO / TI
Electrical Technicians		
<b>SS1</b>	Position, assemble, install and dismantle electrical plant and equipment to agreed specifications.	PO / TI
<b>SS2</b>	Carry out planned, unplanned and preventative maintenance procedures on electrical plant and equipment.	PO / TI
<b>SS3</b>	Replace, repair and/or remove components in electrical plant and equipment and ensure its return to operational condition.	PO / TI
<b>SS4</b>	Diagnose and determine the cause of faults in electrical plant and equipment.	PO / TI

Ref	KSB to be assessed	Assessment Method
<b>Electromechanical Technicians</b>		
<b>SS1</b>	Position, assemble, install and dismantle integrated electromechanical power and control systems.	PO / TI
<b>SS2</b>	Carry out planned, unplanned and preventative maintenance procedures on integrated plant and equipment.	PO / TI
<b>SS3</b>	Replace, repair and/or remove components within integrated plant and equipment and ensure its return to operational condition.	PO / TI
<b>SS4</b>	Diagnose and determine the cause of faults within integrated plant and equipment.	PO / TI
<b>Mechanical Technicians</b>		
<b>SS1</b>	Position, assemble, install and dismantle mechanical plant and equipment to agreed specifications.	PO / TI
<b>SS2</b>	Carry out planned, unplanned and preventative maintenance procedures on mechanical plant and equipment.	PO / TI
<b>SS3</b>	Replace, repair and/or remove components in mechanical plant and equipment and ensure its return to operational condition.	PO / TI
<b>SS4</b>	Diagnose and determine the cause of faults in mechanical plant and equipment.	PO / TI
<b>Plant Operations Technicians</b>		
<b>SS1</b>	Carry out planned operating procedures on plant and equipment.	PO / TI
<b>SS2</b>	Monitor the performance of the plant and equipment.	PO / TI
<b>SS3</b>	Handover and accept responsibility for plant and equipment.	PO / TI
<b>SS4</b>	Respond to contingencies.	TI
<b>Wind Turbines Technicians</b>		
<b>SS1</b>	Install, assemble, commission, and dismantle wind turbine plant and equipment, which will include pitch systems, yaw systems, switchgear, control systems to agreed specifications	PO / TI
<b>SS2</b>	Carry out planned, unplanned and preventative maintenance procedures on wind turbine plant and equipment including mechanical drive systems.	PO / TI
<b>SS3</b>	Replace, repair and/or remove components in wind turbine plant and equipment and ensure its return to operational condition	PO / TI
<b>SS4</b>	Diagnose and determine the cause of faults in wind turbine plant and equipment	PO / TI
<b>Core Behaviours</b>		

Ref	KSB to be assessed	Assessment Method
<b>B1</b>	Health and Safety – follows health and safety policies and procedures and be prepared to challenge unsafe behaviour using appropriate techniques to ensure the protection of people and property when working alone and/or with appropriate supervision	PO
<b>B2</b>	Quality focused – ensures that work achieves quality standard both occupationally and personally	PO
<b>B3</b>	Working with others – has the ability to work well with people from different disciplines, backgrounds and expertise to accomplish an activity safely and on time	PO
<b>B4</b>	Interpersonal skills – gets along well with others and takes into account their needs and concerns	PO
<b>B5</b>	Critical reasoning – uses resources, techniques and obtained facts to develop sound solutions while recognising and defining problems	TI
<b>B6</b>	Sustainability and ethical behaviour – behaves ethically and undertakes work in a way that contributes to sustainable development	PO
<b>B7</b>	Risk awareness – demonstrates high concentration, the desire to reduce risks, ability to be compliant and awareness of change, through regular monitoring and checking of information	PO

### Further Information

For information about SIAS policies, quality assurance, re-sits, appeals, complaints and general enquiries please see our website: [www.siasuk.com](http://www.siasuk.com)

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