







## **Model Curriculum**

**QP Name: AI Devices Installation Operator** 

QP Code: TEL/Q6102

QP Version: 2.0

**NSQF Level: 3** 

**Model Curriculum Version: 1.0** 

Telecom Sector Skill Council Estel House, 3rd Floor, Plot No: - 126, Sector 44 Gurugram, Haryana 122003







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## **Training Parameters**

Sector	Telecom
Sub-Sector	Network Managed Services
Occupation	Network (Active Components) Installation
Country	India
NSQF Level	3
Aligned to NCO/ISCO/ISIC Code	NCO-2015/7421.6102
Minimum Educational Qualification & Experience	Grade 10 pass OR Grade 8 pass with two years of (NTC/ NAC) after 8th OR Grade 8 pass and pursuing continuous schooling in regular school with No Experience required OR Previous relevant Qualification of NSQF Level 2 with 3-year relevant experience
Pre-Requisite License or Training	NA
Minimum Job Entry Age	15 Years
Last Reviewed On	30/06/2022
Next Review Date	30/06/2025
NSQC Approval Date	30/06/2022
QP Version	2.0
Model Curriculum Creation Date	30/06/2022
Model Curriculum Valid Up to Date	30/06/2025
Model Curriculum Version	1.0
Minimum Duration of the Course	420 Hours
Maximum Duration of the Course	420 Hours







## **Program Overview**

This section summarizes the end objectives of the program along with its duration.

#### **Training Outcomes**

At the end of the program, the learner should have acquired the listed knowledge and skills.

- Demonstrate the steps for installing AI devices at customer premises.
- Perform post installation activities to establish AI connectivity.
- Carry out predictive maintenance using AI devices.
- Optimize resources, work efficiently and adhere to safety standards.
- Interact effectively with others while being sensitive of gender and persons with disabilities.

#### **Compulsory Modules**

The table lists the modules and their duration corresponding to the Compulsory NOS of the QP.

NOS and Module Details	Theory Durati on	Practical Duration	On-the-Job Training Duration (Mandatory)	On-the-Job Training Duration (Recomme nded)	Total Durati on
Bridge Module	20:00	10:00	00:00	-	30:00
Module 1: Role and Responsibilities of an AI Devices Installation Operator	20:00	10:00	00:00	-	30:00
TEL/N6106 – Preparing for Installation of AI Devices NOS Version No. 1.0 NSQF Level 3	20:00	30:00	40:00	-	90:00
Module 2: Preparing for Installation of AI Devices	20:00	30:00	40:00	-	90:00
TEL/N6107 – Install AI Devices in the Proposed Business Model NOS Version No. 1.0 NSQF Level 3	20:00	30:00	40:00	-	90:00
Module 3: Installing Al Devices	20:00	30:00	40:00	-	90:00
TEL/N6108 – Predictive maintenance using AI devices NOS Version No. 1.0 NSQF Level 3	40:00	40:00	40:00	-	120:00







Module 4: Performing predictive maintenance using AI devices	40:00	40:00	40:00	-	120:00
TEL/N9101 – Organize work and resources as per health and safety standards NOS Version No. 1.0 NSQF Level 4	10:00	20:00	00:00	-	30:00
Module 5: Optimize resources and work effectively and safely	10:00	20:00	00:00	-	30:00
TEL/N9102– Interact effectively with team members and customers NOS Version No. 1.0 NSQF Level 4	10:00	20:00	00:00	-	30:00
Module 6: Communication and interpersonal skills	10:00	20:00	00:00	-	30:00
DGT/VSQ/N0101: Employability Skills (30 hours)	30:00	00:00	00:00	00:00	30:00
Total Duration	150:00	150:00	120:00	00:00	420:00







### **Module Details**

### Module 1: Introduction to the Role of an AI Devices Installation Operator Mapped to Bridge Module

#### **Terminal Outcomes:**

- Describe the role and responsibilities to be performed by an AI Devices Installation Technician.
- Explain the scope of work for an AI Devices Installation Technician.

Duration: 20:00	Duration: 10:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul> <li>Describe the size and scope of the Telecom industry and its various sub-sectors.</li> <li>Explain the role and responsibilities of an AI Devices Installation Technician.</li> <li>Discuss the organisational policies on workplace ethics, managing sites, quality standards, personnel management and public relations (PR).</li> <li>Describe the process workflow in the organization and the role of an AI Devices Installation Technician in the process.</li> <li>List the various daily, weekly, monthly operations/activities that take place at the site under an AI Devices Installation Technician.</li> </ul>	<ul> <li>Evaluate case studies outlining the role, responsibilities, and challenges for an AI Devices Installation Technician.</li> <li>Analyse the requirements for the course and prepare an action/learning plan for updating skills as per the pre-requisites of the course.</li> </ul>

Laptop, white board, marker, projector

#### **Tools, Equipment and Other Requirements**

Documents of standard operating procedures, code of conduct, checklists, schedules tools and equipment, status report







## Module 2: Preparing for Installation of AI Devices *Mapped to TEL/N6106 v1.0*

#### **Terminal Outcomes:**

- Perform activities related to requirements analysis.
- Demonstrate the steps for collating data based.

<b>Duration</b> : 20:00	Duration: 30:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul> <li>Identify the primary optimization requirements of the customer in terms of security, asset, performance, etc.</li> <li>Describe the basic functions and applications of AI.</li> <li>Outline the AI use cases and typical applications in the Telecom sector.</li> <li>Explain how to analyse the current business model of the customer to formulate AI solution for improving and testing its feasibility.</li> <li>Distinguish between the emergency services AI (continuity and accuracy) and AI for mass data analytics (volume and sample size).</li> <li>Explain the implementation of IoT in different sectors including manufacturing, transportation, and so on.</li> <li>Coordinate with the manager to provide a suitable business model (AI devices, their quantity, location, support applications etc.) based on the customer requirements and specifications.</li> <li>Describe the process for analysing the collected data about trending technologies and their application in the business model.</li> <li>List the products, competitors and landscapes to ensure the reliability/preferences on AI devices for the proposed AI solution.</li> </ul>	<ul> <li>Employ various techniques to collect performance reports of previously installed devices such as sensors, biometric, etc.</li> <li>Implement the steps to test performance of devices to supply chain and logistics operations.</li> <li>Perform the steps for establishing connectivity of devices with robotics and Al.</li> <li>Demonstrate how to collect data for industry trends from various reliable sources and use it for solution development and their application for the Al devices proposed.</li> <li>Demonstrate how to evaluate the selected supplier on the basis of solution performance, geographic availability, support services and security, etc.</li> <li>Perform the steps to check the Al devices for real-time data optimization as per requirements and specifications.</li> </ul>
Classroom Aids:	
Laptop, white board, marker, projector	

**Tools, Equipment and Other Requirements** 







Tools and equipment, different AI devices

Service Manual/User Manuals, Customer Registration, Program Authentication Form, Customer Feedback form







## Module 3: Installing AI Devices *Mapped to TEL/N6107 v1.0*

#### **Terminal Outcomes:**

- Perform pre-installation activities.
- Demonstrate the steps for routing of installed devices.

Ouration: 20:00	Duration: 30:00
heory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul> <li>Define the business systems implementation for efficient interaction between devices.</li> <li>Outline the business intelligence and various associated developer/engineer and data scientist roles involved in the installation process.</li> <li>Describe the basics of machine learning (ML), and the research and science involved in the application of Al.</li> <li>Identify the basic connectivity, network and communication protocol requirements.</li> <li>Explain the prerequisites for basic elements for installation, set up and connection of the devices.</li> <li>Identify the embedded systems and analyse their effectiveness for collating and monitoring data.</li> <li>List the types of micro-processor boards need to be integrated as per the current required setup on site.</li> <li>Illustrate the types of features required for devices such as Connectivity, Analyzing, Integrating, etc.</li> <li>Describe the functioning of sensors to check their requirement for the current business model.</li> <li>Emphasize on the importance of assessing the application of sensors fitment to the business model.</li> <li>Explain the application of short- and long-range protocols for the surveillance cameras.</li> <li>List the software/hardware required to achieve optimal output in the proposed</li> </ul>	<ul> <li>Perform the steps to analyse if the model fits the architectural design of the building.</li> <li>Implement various methods to establish the working process including Data Collection, Device Integration, Real-Time Analytics, Application and Process Extension.</li> <li>Demonstrate how to use tools and techniques for monitoring and improvising the network performance.</li> <li>Employ various techniques for testing the sensors and actuators.</li> <li>Demonstrate how to install and use the smart devices that use embedded systems to collect, send and act on data they acquire from their environment.</li> </ul>

#### **Classroom Aids:**

solution.

Laptop, white board, marker, projector







#### **Tools, Equipment and Other Requirements**

Processors, controllers, sensors and communication hardware
Types of microprocessor boards like Arduino, raspberry-Pi, customized platforms etc.
Devices such as humidity sensor, temperature sensor, gyro meter, accelerometer, video surveillance cameras
Tools and equipment







## Module 4: Performing Predictive Maintenance Using AI Devices *Mapped to TEL/N6108 v1.0*

#### **Terminal Outcomes:**

- Perform predictive maintenance of the devices.
- Implement techniques for application of virtual assistants.
- Maintain documentation.

<ul> <li>Identify the use of different types of predictive analytics software and virtual assistants.</li> <li>List the standard fault-finding (troubleshooting) techniques.</li> <li>Explain how to use AI to understand the relationship between sensors.</li> <li>Describe how to prepare a preventive maintenance strategy with the team.</li> <li>Emphasize on the importance of timely coordination with the superiors/team members to complete the activities.</li> <li>Define the procedure to provide timely information about on-going maintenance works, outages and general regulatory.</li> <li>Outline how to update and prioritise tickets for human agents if issues are not resolved.</li> <li>Emphasize the significance of reporting all incidents and requests and logging these properly in reports/records.</li> <li>Explain how to coordinate with authority for documents validation and verification to check for any anomalies in the working of the devices.</li> <li>Demonstrate how to use UE simulators like Aeroflex TM500 and Keysight and debuggers like QXDM, XCAL and TEMS, channel and network Emulators.</li> <li>Implement various techniques to record the warning notifications and diagnosis of equipment provided by predictive analytics software and analyse these to perform maintenance.</li> <li>Demonstrate how to fix the faults on site.</li> <li>Employ different techniques to perform tests and run system health checks for initial troubleshooting phase of the device.</li> <li>Perform the steps to use UE simulators like Aeroflex TM500 and Keysight and debuggers like QXDM, XCAL and TEMS, channel and network Emulators.</li> <li>Implement various techniques to record the warning notifications and diagnosis of equipment provided by predictive analytics software and analyse these to perform tests and run system health checks for initial troubleshooting phase of the device.</li> <li>Perform the steps to run call detail records (CDRs)/trace.</li> <li>Employ the methods to</li></ul>	<b>Duration</b> : 40:00	Duration: 40:00
<ul> <li>predictive analytics software and virtual assistants.</li> <li>List the standard fault-finding (troubleshooting) techniques.</li> <li>Explain how to use AI to understand the relationship between sensors.</li> <li>Describe how to prepare a preventive maintenance strategy with the team.</li> <li>Emphasize on the importance of timely coordination with the superiors/team members to complete the activities.</li> <li>Define the procedure to provide timely information about on-going maintenance works, outages and general regulatory.</li> <li>Outline how to update and prioritise tickets for human agents if issues are not resolved.</li> <li>Emphasize the significance of reporting all incidents and requests and logging these properly in reports/records.</li> <li>Explain how to coordinate with authority for documents validation and verification to check for any anomalies in the working</li> </ul>	Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
Classica and Aida.	<ul> <li>predictive analytics software and virtual assistants.</li> <li>List the standard fault-finding (troubleshooting) techniques.</li> <li>Explain how to use AI to understand the relationship between sensors.</li> <li>Describe how to prepare a preventive maintenance strategy with the team.</li> <li>Emphasize on the importance of timely coordination with the superiors/team members to complete the activities.</li> <li>Define the procedure to provide timely information about on-going maintenance works, outages and general regulatory.</li> <li>Outline how to update and prioritise tickets for human agents if issues are not resolved.</li> <li>Emphasize the significance of reporting all incidents and requests and logging these properly in reports/records.</li> <li>Explain how to coordinate with authority for documents validation and verification to check for any anomalies in the working of the devices.</li> </ul>	<ul> <li>tools.</li> <li>Perform the steps to use UE simulators like Aeroflex TM500 and Keysight and debuggers like QXDM, XCAL and TEMS, channel and network Emulators.</li> <li>Implement various techniques to record the warning notifications and diagnosis of equipment provided by predictive analytics software and analyse these to perform maintenance.</li> <li>Demonstrate how to fix the faults on site.</li> <li>Employ different techniques to perform tests and run system health checks for initial troubleshooting phase of the device.</li> <li>Perform the steps to run call detail records (CDRs)/ trace.</li> <li>Employ the methods to timely collect and record data in various formats (PDF/XML/HTML/DOC) to generate required</li> </ul>

#### **Classroom Aids:**

Laptop, white board, marker, projector

#### **Tools, Equipment and Other Requirements**

Processors, controllers, sensors and communication hardware
Types of microprocessor boards like Arduino, raspberry-Pi, customized platforms etc.
Devices such as humidity sensor, temperature sensor, gyro meter, accelerometer, video surveillance cameras







# Module 5: Organize Work and Resources as per Health and Safety Standards $Mapped\ to\ TEL/N9101\ v1.0$

#### **Terminal Outcomes:**

• Plan work effectively, implement safety practices and optimize use of resources.

Duration: 10:00	Duration: 20:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul> <li>List the recent skills and technologies prevalent in the telecom industry.</li> </ul>	Prepare a time schedule to complete the tasks on the given time.
<ul> <li>Discuss some commonly occurring problems with their causes and solutions.</li> <li>State the importance of keeping the workplace clean, safe and tidy.</li> </ul>	Demonstrate the use of safety equipment such as goggles, gloves, ear plugs, shoes etc.  Demonstrate the correct postures while
<ul> <li>Outline the organizational structure to assign duties and responsibilities to each team member.</li> </ul>	<ul> <li>Demonstrate the correct postures while working and handling hazardous materials at the workplace.</li> <li>Demonstrate how to evacuate the</li> </ul>
<ul> <li>List different types of hazards and the procedure to report it to the supervisor.</li> </ul>	<ul> <li>bemonstrate now to evacuate the workplace in case of an emergency.</li> <li>Show how to sanitize and disinfect one's</li> </ul>
<ul> <li>List the precautionary steps one needs to follow while handling hazardous materials.</li> </ul>	<ul> <li>work area regularly.</li> <li>Demonstrate the correct way of washing</li> </ul>
<ul> <li>State the importance of participating in fire drills and other safety workshops.</li> </ul>	<ul><li>hands using soap and water.</li><li>Demonstrate the correct way of sanitizing</li></ul>
<ul> <li>Discuss the significance of conforming to basic hygiene practices such as washing hands, using alcohol-based hand sanitizers.</li> </ul>	<ul> <li>hands using alcohol-based hand rubs.</li> <li>Display the correct way of wearing and removing PPE such as face masks, hand</li> </ul>
<ul> <li>List the different methods of cleaning, disinfection, sanitization etc.</li> </ul>	gloves, face shields, PPE suits, etc.  • Demonstrate warning labels, symbols and
Define self-quarantine or self-isolation.	other related signages.
<ul> <li>Explain the path of disease transmission.</li> <li>Discuss organizational hygiene and sanitation guidelines and ways of reporting</li> </ul>	<ul> <li>Perform basic checks to identify any spills and leaks and that need to be plugged /stopped.</li> </ul>
breaches/gaps if any.	Demonstrate different disposal techniques depending upon different types of waste.
<ul> <li>Explain the ways to optimize usage of resources.</li> </ul>	Employ different ways to clean and check if
<ul> <li>Discuss various methods of waste management and its disposal.</li> </ul>	equipment/machines are functioning as per requirements and report malfunctioning, if observed.
<ul> <li>List the different categories of waste for the purpose of segregation.</li> </ul>	<ul> <li>Employ ways for efficient utilization of material and water.</li> </ul>
<ul> <li>Differentiate between recyclable and non- recyclable waste.</li> </ul>	Use energy efficient electrical appliances
<ul> <li>State the importance of using appropriate colour dustbins for different types of waste.</li> </ul>	and devices to ensure energy conservation.
Discuss the common sources of pollution	

and ways to minimize it.







#### **Classroom Aids:**

White board/ black board marker / chalk, duster, computer or Laptop attached to LCD projector

#### **Tools, Equipment and Other Requirements**

Personal Protection Equipment: safety glasses, head protection, rubber gloves, safety footwear, warning signs and tapes, fire extinguisher and first aid kit







## Module 6: Communication and Interpersonal Skills *Mapped to TEL/N9102 v1.0*

#### **Terminal Outcomes:**

- Communicate effectively and develop interpersonal skills
- Develop sensitivity towards differently abled people.

Duration: 10:00	Duration: 20:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul> <li>Discuss the importance of following the standard operating procedures of the company w.r.t. priority, confidentiality and security.</li> <li>Outline the organizational structure to receive work instruction and report issues to the supervisor.</li> <li>Discuss the importance of having timely discussions with all genders to avoid repeated errors.</li> <li>State the importance of co-ordinating and resolving conflicts with the team members to achieve smooth workflow.</li> <li>Discuss about the different types of disabilities with their respective issues.</li> <li>State the work ethics, workplace etiquettes as well as standards and guidelines for all genders and PwD.</li> <li>List health and safety requirements for persons with disability.</li> <li>Describe the rights, duties and benefits available at workplace for person with disability.</li> <li>Explain the process of recruiting people with disability for a specific job.</li> <li>Discuss the specific ways to help people with disability to overcome the challenges.</li> </ul> Classroom Aids:	<ul> <li>Use different modes of communication as per requirement and need.</li> <li>Prepare a sample report of the commonly occurring errors and their solutions.</li> <li>Use inclusive language irrespective of the gender/ disability of the person.</li> <li>Demonstrate appropriate behaviour towards all genders and differently abled people.</li> <li>Prepare a list of institutes and government schemes that help PwD in overcoming challenges.</li> <li>Demonstrate the ideal behaviour with a PwD in an organization.</li> </ul>

White board/ black board marker / chalk, duster, computer or Laptop attached to LCD projector

#### **Tools, Equipment and Other Requirements**

Sample of escalation matrix, organisation structure.







## Module 7: On-the-Job Training Mapped to AI Devices Installation Operator

Mandatory Duration: 120:00 Recommended Duration: 00:00

**Location: On-Site** 

#### **Terminal Outcomes**

- 1. Collate performance reports of previously installed devices such as sensors, biometric, etc.
- 2. Validate and test performance of devices to supply chain and logistics operations.
- 3. Demonstrate establishing connectivity of devices with robotics and Al.
- 4. Accumulate data for industry trends from various reliable sources.
- 5. Evaluate the selected supplier.
- 6. Test the AI devices for real-time data optimization as per requirements and specifications.
- 7. Establish the working processes such as Data Collection, Device Integration, Real-Time Analytics, Application and Process Extension.
- 8. Monitor and improvise the network performance.
- 9. Test the sensors and actuators.
- 10. Install and use the smart devices.
- 11. Demonstrate how to use the various testing tools.
- 12. Use UE simulators, emulators and debuggers.
- 13. Record warning notifications and diagnosis of equipment provided by predictive analytics software and analyse these to perform maintenance.
- 14. Troubleshoot and fix the faults on site.
- 15. Run tests and system health checks.
- 16. Run call detail records (CDRs)/ trace.
- 17. Record data in various formats (PDF/XML/HTML/DOC) to generate required diagnostic and other reports.







### Module 8: DGT/VSQ/N0101 Employability Skills (30 hours) Mapped to AI Devices Installation Operator

**Mandatory Duration**: 30:00 **Location: On-Site** S.N Duration **Module Name Key Learning Outcomes** ο. (hours) Introduction to Discuss the importance of Employability Skills in meeting the 1 1. **Employability Skills** job requirements. Constitutional Explain constitutional values, civic rights, duties, citizenship, values - Citizenship responsibility towards society etc. that are required to be 2. followed to become a responsible citizen. 1 Show how to practice different environmentally sustainable practices. Becoming a Discuss 21st century skills. Professional in the Display positive attitude, self-motivation, problem solving, 3. 1 21st Century time management skills and continuous learning mindset in different situations. Basic English Skills Use appropriate basic English sentences/phrases while 2 4. speaking. Communication Demonstrate how to communicate in a well -mannered way Skills 5. with others. 4 Demonstrate working with others in a team. Diversity & Show how to conduct oneself appropriately with all genders Inclusion and PwD. 6. 1 Discuss the significance of reporting sexual harassment issues Financial and Legal Discuss the significance of using financial products and Literacy services safely and securely. Explain the importance of managing expenses, income, and 7. 4 savings. Explain the significance of approaching the concerned authorities in time for any exploitation as per legal rights and **Essential Digital** Show how to operate digital devices and use the associated Skills applications and features, safely and securely. 8. 3 Discuss the significance of using internet for browsing, accessing social media platforms, safely and securely. Entrepreneurship Discuss the need for identifying opportunities for potential 9. business, sources for arranging money and potential legal and 7 financial challenges. **Customer Service** Differentiate between types of customers. Explain the significance of identifying customer needs and 10. addressing them. 4 Discuss the significance of maintaining hygiene and dressing appropriately. Getting ready for Create a biodata. apprenticeship & Use various sources to search and apply for jobs. Jobs Discuss the significance of dressing up neatly and maintaining 2 11 hygiene for an interview. Discuss how to search and register for apprenticeship opportunities.







LIST OF TOOLS & EQUIPMENT FOR EMPLOYABILITY SKILLS					
S No.	Name of the Equipment	Quantity			
1.	Computer (PC) with latest configurations – and Internet connection with standard operating system and standard word processor and worksheet software (Licensed)  (all software should either be latest version or one/two version below)	As required			
2.	UPS	As required			
3.	Scanner cum Printer	As required			
4.	Computer Tables	As required			
5.	Computer Chairs	As required			
6.	LCD Projector	As required			
7.	White Board 1200mm x 900mm	As required			
Note: Abo	Note: Above Tools &Equipment not required, if Computer LAB is available in the institute.				







### **Annexure**

### **Trainer Requirements (AI Devices Installation Operator)**

Trainer Prerequisites						
Minimum Educational	Specialization		Relevant Industry Experience		ng ence	Remarks
Qualification		Years	Specialization	Years	Specialization	
Diploma after 10 <sup>th</sup> Class	Science/Electronics/Telecom /IT and other related domains	4	Active Networks/IoT Domain	0	NA	Eligible for ToTprogram
Graduate	Science/Electronics/Telecom /IT and other relevant domains	1	Active Networks/IoT Domain	0	NA	Eligible for ToT program

Trainer Certification					
Domain Certification	Platform Certification				
Job Role "AI Devices Installation Operator", "TEL/Q6102, v2.0", Minimum accepted score is 80%	Job Role: " <b>Trainer (VET and Skills)</b> ","MEP/Q2601 v2.0", Minimum Accepted score is 80%				







### **Assessor Requirements (AI Devices Installation Operator)**

Assessor Prerequisites						
Minimum Educational	Specialization	Relevant Industry Experience		Training/Assessment Experience		Remarks
Qualification		Years	Specialization	Years	Specialization	
Diploma after 10 <sup>th</sup> Class	Science/Electronics/Tel ecom/IT and other related domains	4	Active Networks/IoT Domain	0	NA	Eligible for ToA program
Graduate	Science/Electronics/Tel ecom/IT and other relevant domains	1	Active Networks/IoT Domain	0	NA	Eligible for ToA program

Assessor Certification				
Domain Certification Platform Certification				
Job Role "AI Devices Installation Operator", "TEL/Q6102, v2.0", Minimum accepted score is 80%	Job Role: "Assessor (VET and Skills)", "MEP/Q2701 v2.0", Minimum Accepted score is 80%			







Trainer Requirements (Employability Skills 30 hours)

Trainer Prerequisites						
Minimum Specialization Educational Qualification	Specialization	Relevant Industry Experience		Training Experience		Remarks
		Years	Specialization	Years	Specialization	
Graduate/CITS	Any discipline			2	Teaching experience	Prospective ES trainer should:
Current ITI trainers	Employability Skills Training (3 days full-time course done between 2019-2022)					<ul> <li>have good         communication skills</li> <li>be well versed in         English</li> <li>have digital skills</li> </ul>
Certified current EEE trainers (155 hours)	from Management SSC (MEPSC)					<ul> <li>have attention to detail</li> <li>be adaptable</li> <li>have willingness to</li> </ul>
Certified Trainer	Qualification Pack: Trainer (MEP/Q0102)					learn

Trainer Certification					
Domain Certification	Platform Certification				
Certified in 30-hour Employability NOS (2022), with a minimum score of <b>80%</b>	NA				
OR					
Certified in 120- OR 90- OR 60-hour Employability NOS (2022), with a minimum score of <b>80%</b>					







### Master Trainer Requirements (Employability Skills 30 hours)

Master Trainer Prerequisites						
Minimum Educational	Specialization	Relevant Industry Experience		Training Experience		Remarks
Qualification		Years	Specialization	Years	Specialization	
Graduate/CITS	Any discipline			3	Employability Skills curriculum training experience with an interest to train as well as orient other peer trainers	Prospective ES Master trainer should:  • have good communication skills • be well versed in English • have basic digital skills
Certified Master Trainer	Qualification Pack: Master Trainer (MEP/Q2602			3	EEE training of Management SSC (MEPSC) (155 hours)	<ul> <li>have attention to detail</li> <li>be adaptable</li> <li>have willingness to learn</li> <li>be able to grasp concepts fast and is creative with teaching practices and likes sharing back their learning with others</li> </ul>

Master Trainer Certification					
Domain Certification	Platform Certification				
Certified in 30-hour Employability NOS (2022), with a minimum score of <b>90%</b> .	NA				
OR					
Certified in 120- OR 90- OR 60-hour Employability NOS (2022), with a minimum score of <b>90%</b>					







#### **Assessment Strategy**

- 1. Assessment System Overview:
  - Batches assigned to the assessment agencies for conducting the assessment on SDSM/SIP or email
  - Assessment agencies send the assessment confirmation to VTP/TC looping SSC
  - Assessment agency deploys the ToA certified Assessor for executing the assessment
  - SSC monitors the assessment process & records

#### 2. Testing Environment:

- Confirm that the centre is available at the same address as mentioned on SDMS or SIP
- Check the duration of the training.
- Check the Assessment Start and End time to be as 10 a.m. and 5 p.m.
- If the batch size is more than 30, then there should be 2 Assessors.
- Check that the allotted time to the candidates to complete Theory & Practical Assessment is correct.
- Check the mode of assessment—Online (TAB/Computer) or Offline (OMR/PP).
- Confirm the number of TABs on the ground are correct to execute the Assessment smoothly.
- Check the availability of the Lab Equipment for the particular Job Role.

#### 3. Assessment Quality Assurance levels / Framework:

- Question papers created by the Subject Matter Experts (SME)
- Question papers created by the SME verified by the other subject Matter Experts
- Questions are mapped with NOS and PC
- Question papers are prepared considering that level 1 to 3 are for the unskilled & semi-skilled individuals, and level 4 and above are for the skilled, supervisor & higher management
- Assessor must be ToA certified & trainer must be ToT Certified
- Assessment agency must follow the assessment guidelines to conduct the assessment

#### 4. Types of evidence or evidence-gathering protocol:

- Time-stamped & geotagged reporting of the assessor from assessment location
- Center photographs with signboards and scheme specific branding
- Biometric or manual attendance sheet (stamped by TP) of the trainees during the training period
- Time-stamped & geotagged assessment (Theory + Viva + Practical) photographs & videos

#### 5. Method of verification or validation:

- Surprise visit to the assessment location
- · Random audit of the batch
- Random audit of any candidate

#### 6. Method for assessment documentation, archiving, and access

- Hard copies of the documents are stored
- Soft copies of the documents & photographs of the assessment are uploaded / accessed from Cloud Storage
- Soft copies of the documents & photographs of the assessment are stored in the Hard Drives

#### **Assessment Strategy (Employability Skills 30 hours)**

The trainee will be tested for the acquired skill, knowledge and attitude through formative/summative assessment at the end of the course and as this NOS and MC is adopted across sectors and qualifications, the respective AB can conduct the assessments as per their requirements.







### References

### Glossary

Term	Description
Declarative Knowledge	Declarative knowledge refers to facts, concepts and principles that need to be known and/or understood in order to accomplish a task or to solve a problem.
Key Learning Outcome	Key learning outcome is the statement of what a learner needs to know, understand and be able to do in order to achieve the terminal outcomes. A set of key learning outcomes will make up the training outcomes. Training outcome is specified in terms of knowledge, understanding (theory) and skills (practical application).
OJT (M)	On-the-job training (Mandatory); trainees are mandated to complete specified hours of training on site
OJT (R)	On-the-job training (Recommended); trainees are recommended the specified hours of training on site
Procedural Knowledge	Procedural knowledge addresses how to do something, or how to perform a task. It is the ability to work, or produce a tangible work output by applying cognitive, affective or psychomotor skills.
Training Outcome	Training outcome is a statement of what a learner will know, understand and be able to do <b>upon the completion of the training</b> .
Terminal Outcome	Terminal outcome is a statement of what a learner will know, understand and be able to do <b>upon the completion of a module.</b> A set of terminal outcomes help to achieve the training outcome.







### **Acronyms and Abbreviations**

AC	Air Conditioner
DG	Diesel Generator
PIU	Power Interface Unit
SMPS	Switch Mode Power Supply
ВВ	Battery Bank
IPMS	Integrated Power Management System
ОРСО	Operating Company
PM	Preventive Maintenance
OPEX	Operating Expenditure
PPE	Personal Protective Equipment
RCA	Root Cause Analysis
PwD	Persons with Disabilities
CRM	Customer Relationship Management
ЕВ	Electricity Board
RFS	Radio Frequency Services
NOC	Network Operating Centre
SRN	Service Request Number
ES	Employability Skills