







# **Model Curriculum**

QP Name: Drone Monitoring and Maintenance Associate

QP Code: TEL/Q6217

Version: 3.0

NSQF Level: 3

Model Curriculum Version: 3.0

Telecom Sector Skill Council || 3rd Floor, Plot No. 126, Sector – 44 Gurgaon – 122003







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# **Training Parameters**

Sector	Telecom
Sub-Sector	Network Managed Services
Occupation	Network Operation and Maintenance
Country	India
NSQF Level	3
Aligned to NCO/ISCO/ISIC Code	NCO-2015/1330.6217
Minimum Educational Qualification and Experience	Or 9th Grade pass with 1-years of relevant experience* Or Previous relevant Qualification of NSQF Level 2.5 with 1.5 years of relevant experience* Or Previous relevant Qualification of NSQF Level 2 with 3-year relevant experience*  *Relevant experience in drone operations, electronics or hardware maintenance, IT/hardware support, telecom field work, and technical assistance.  The relevant experience would include work, internship, or apprenticeship after completing relevant educational qualifications.
Minimum Level of Education for Training in School	9 <sup>th</sup> Class
Pre-Requisite License or Training	NA
Minimum Job Entry Age	
Last Reviewed On	19-Aug-2025
Next Review Date	30-June-2028
NSQC Approval Date	19-Aug-2025
QP Version	3.0
Model Curriculum Creation Date	19-Aug-2025







Model Curriculum Valid Up to Date	30-June-2028
Model Curriculum Version	3.0
Minimum Duration of the Course	390 hours
Maximum Duration of the Course	390 hours







## **Program Overview**

This section summarises 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 to:

- Demonstrate the ability to assist in drone monitoring operations by conducting pre-flight inspections, supporting safe flight execution, and documenting mission outcomes as per standard protocols.
- Apply basic maintenance procedures, including cleaning, inspecting, troubleshooting, and replacing minor drone components to ensure operational readiness and safety.
- Use digital tools and applications to log flight data, track inventory, update maintenance records, and communicate effectively with team members and supervisors.
- Perform work activities in adherence to health, safety, and environmental standards, including PPE, hazard reporting, energy conservation, and waste management practices.
- Collaborate with team members, supervisors, and customers using professional communication, inclusive behaviour, and conflict-resolution techniques to maintain a productive and respectful work environment.

## **Compulsory Modules**

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

NOS and Module Details	Theory Duration	Practical Duration	On-the-Job Training Duration (Mandatory)	On-the-Job Training Duration (Recommended)	Total Duration
TEL/N6258: Manage and Analyse Drone Data NOS Version- 3.0 NSQF Level- 3	40:00	50:00	60:00	-	150:00
Module 1: Introduction to the role of Drone Monitoring and Maintenance Associate	10:00	-	-	-	10:00
Module 2: Manage and Analyse Drone Data	30:00	50:00	60:00	-	140:00
TEL/N6259: Operate and Maintain the Drone System NOS Version- 3.0 NSQF Level- 3	30:00	50:00	70:00	-	150:00
Module 3: Operate and Maintain the Drone System	30:00	50:00	70:00	-	150:00
TEL/N9101: Organise Work and Resources as per Health and Safety	10:00	10:00	10:00	-	30:00

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Standards NOS Vention 2.0					
NOS Version- 3.0					
NSQF Level- 3					
Module 4: Organise Work and Resources as per Health and Safety Standard	10:00	10:00	10:00	-	30:00
TEL/N9102: Interact Effectively with Team Members and Customers NOS Version- 3.0 NSQF Level- 3	10:00	10:00	10:00	-	30:00
Module 5: Interact Effectively with Team Members and Customers	10:00	10:00	10:00	-	30:00
DGT/VSQ/N0101: Employability Skills (30 Hours) NOS Version No. 1 NSQF Level- 3	30:00	-	-	-	30:00
Module 6: Employability Skills (30 hours)	30:00	-	-	-	30:00
Total Duration	120:00	120:00	150:00	-	390:00







# **Module Details**

# Module 1: Introduction to the Role of Drone Monitoring and Maintenance Associate

Bridge Module TEL/N6258, v3.0

#### **Terminal Outcomes:**

- Outline the spread of the telecom sector in India.
- Discuss the job role of a Drone Monitoring and Maintenance Associate.
- Explain the scope of work for the Drone Monitoring and Maintenance Associate.

Duration: 10:00	Duration: 00:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul> <li>Describe the size and scope of the Telecom industry and its sub-sectors.</li> </ul>	
<ul> <li>Discuss the role and responsibilities of a Drone Monitoring and Maintenance Associate.</li> </ul>	
<ul> <li>Identify various employment opportunities for a Drone Monitoring and Maintenance Associate.</li> </ul>	
<ul> <li>Discuss the organisational policies on workplace ethics, managing sites, quality standards, personnel management and public relations (PR).</li> </ul>	
<ul> <li>Describe the process workflow in the organisation and the role of the Drone Monitoring and Maintenance Associate.</li> </ul>	
<ul> <li>List the various daily, weekly, and monthly operations/activities that take place at the site under a Drone Monitoring and Maintenance Associate.</li> </ul>	

#### **Classroom Aids**

Training Kit (Trainer Guide, Presentations), Whiteboard, Markers, Notebooks, Pens, Laptop/Computer with an Internet connection, Speakers, Projector or Large screen.

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

NA







## **Module 2: Manage and Analyse Drone Data**

Mapped to NOS: TEL/N6258, v3.0

#### **Terminal Outcomes:**

- Demonstrate the setup, calibration, and integration of payload sensors and 5G communication modules on drones as per operational requirements.
- Conduct pre-flight checks and real-time monitoring to ensure uninterrupted data transmission and storage redundancy during drone missions.
- Use appropriate tools and software to retrieve, inspect, and interpret drone-generated data, including imagery, telemetry, and GPS logs.
- Compose structured mission reports by analysing data quality, identifying anomalies, and documenting flight metadata for handover and archival.

Duration: 30:00	Duration: 50:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul> <li>Explain the types and operational uses of drones commonly deployed for data collection tasks.</li> </ul>	<ul> <li>Demonstrate correct mounting and calibration of different payload sensors on drones according to standard procedures.</li> </ul>
<ul> <li>Describe different types of payload sensors (e.g., RGB camera, thermal, LiDAR, multispectral) and their associated data</li> </ul>	<ul> <li>Perform configuration of 5G modules (e.g., CPE, modems) and verify operational readiness using signal diagnostics.</li> </ul>
<ul> <li>Discuss the basics of 5G communication, including latency, bandwidth, coverage, and</li> </ul>	<ul> <li>Conduct a pre-flight test to validate GPS synchronisation, sensor activation, and real- time 5G streaming capability.</li> </ul>
<ul> <li>their role in drone data transmission.</li> <li>Outline the procedures to mount, integrate, and configure 5G-enabled communication</li> </ul>	<ul> <li>Use ground control software to activate data capture, initiate transmission, and monitor telemetry indicators.</li> </ul>
<ul><li>modules on drones.</li><li>Identify key telemetry parameters and their influence on flight performance and data</li></ul>	<ul> <li>Monitor real-time transmission quality and respond appropriately to signal drop, latency, or compression errors.</li> </ul>
<ul> <li>integrity.</li> <li>List standard file formats (.MP4, .CSV, .TIFF, etc.) used in drone data collection and</li> </ul>	<ul> <li>Apply corrective techniques such as adjusting flight position or antenna alignment to restore transmission quality.</li> </ul>
explain their significance.	<ul> <li>Perform secure downloading of post-flight</li> </ul>

- Describe methods for onboard and cloudbased data storage to ensure data redundancy and security.
- Explain how ground control software platforms (e.g., Pix4Dcapture, DJI GS Pro, QGroundControl) are used to initiate and monitor drone missions.
- Discuss risks related to signal interference,

- Perform secure downloading of post-flight data from onboard storage (e.g., SD card, SSD).
- Use data visualisation tools or drone OEM software to review and assess the completeness of captured data.
- Identify relevant features or anomalies in images, telemetry, or video streams (e.g., asset damage, signal loss zones).







- data compression, and transmission losses during 5G drone operations.
- Describe the process of extracting, verifying, and archiving flight logs and drone-generated data.
- Explain basic data analysis and visualisation tools for interpreting imagery, telemetry, and map overlays.
- Identify types of data anomalies and methods to verify consistency using timestamps and GPS metadata.
- Discuss standard procedures for data privacy, compliance, and secure handover of mission data.

- Match time-stamps across video, GPS, and telemetry to ensure consistency and flight integrity.
- Tag and organise data files using appropriate mission metadata for structured storage.
- Compose a concise report summarising mission data quality, flight performance, anomalies, and recommendations.
- Collaborate with technical supervisors or analysts to discuss findings and transfer data securely and competently.

#### **Classroom Aids:**

Training Kit (Trainer Guide, Presentations), Whiteboard, Markers, Notebooks, Pens, Laptop/Computer with an Internet connection, Speakers, Projector or Large screen.

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

Drone with 5G capability, RGB camera, Thermal sensor, LiDAR unit, SD cards, External SSD, 5G CPE/Modem/Dongle, Ground Control Station (GCS), Mission planning software (e.g., QGroundControl, DJI GS Pro, Pix4Dcapture), GPS module, Drone battery packs, Battery charging station, Drone diagnostic tools, Internet connectivity (5G and fallback), SIM cards with data plans, Field signal tester or analyser, PPE (gloves, goggles, reflective vests, Safety boots), First aid kit, Fire extinguisher, Data visualisation software (e.g., QGIS, Google Earth, Open Drone Map), Drone flight logbooks.







## **Module 3: Operate and Maintain the Drone System**

Mapped to NOS: TEL/N6259, v3.0

#### **Terminal Outcomes:**

- Demonstrate the ability to conduct thorough visual inspections and routine preventive maintenance on drones using standard procedures and tools.
- Apply ground control software to assist in configuring, calibrating, and verifying the readiness of 5G-enabled drones before deployment.
- Perform pre-flight safety checks, firmware updates, and emergency function validations to ensure airworthiness and operational compliance.
- Use appropriate safety gear and follow regulatory protocols to effectively manage battery safety, drone handling, and operational zone compliance.

## Duration: 30:00 Duration: 50:00

#### **Theory – Key Learning Outcomes**

- Explain the key components of drone hardware including airframe, motors, ESCs, sensors, GPS modules, and payload interfaces.
- Describe common signs of wear, damage, or malfunction in drone structures, propellers, wiring, and motors.
- Identify cleaning tools, preventive maintenance materials, and appropriate safety gear for drone handling and upkeep.
- Discuss standard calibration processes for sensors like IMU, compass, gimbal, and GPS using ground control software.
- Illustrate the steps for updating firmware, configuring flight controllers, and resolving software compatibility issues.
- Explain battery handling protocols, charging safety norms, and signs of battery degradation.
- Describe 5G communication integration, virtual geofencing, and drone boundary configurations for safe deployment.
- Interpret key diagnostic indicators related to system health, signal strength, GPS lock, and video feed readiness.
- Recall standard operating procedures (SOPs) for take-off, emergency handling,

#### **Practical – Key Learning Outcomes**

- Demonstrate visual inspection of the drone frame, propellers, mounts, and wiring to detect structural or electrical anomalies.
- Apply cleaning techniques using lint-free cloth, compressed air, and safe cleaning agents to remove dust and debris.
- Use standard tools to replace damaged or worn components such as propellers, dampeners, and landing gear.
- Perform basic IMU, compass, and gimbal calibration using ground control software.
- Conduct motor diagnostics and verify vibration patterns and RPM stability using onboard test features.
- Display proper battery inspection, including identification of swelling, leakage, or abnormal heat signatures.
- Apply firmware updates to the drone and payload modules via OTA or USB interfaces, ensuring compatibility.
- Conduct pre-flight system diagnostics for 5G module readiness, GPS lock, satellite count, and sensor status.
- Plan and assist in the setup of virtual geofencing and flight boundaries based on mission needs.
- Perform take-off area safety verification by







and landing of drones.

- Discuss airspace restrictions, EMI risks, and weather factors that affect drone safety and compliance.
- Explain the importance of proper logbook documentation and error reporting for accountability and audits.
- State the significance of collaborating with the technical team to ensure compliance with operational checklists and airspace regulations.

- checking for EMI sources, obstructions, and zone readiness.
- Conduct a Return-To-Home (RTH) test and demonstrate emergency stop procedures as per SOP.
- Use PPE effectively while handling batteries and drone equipment in accordance with safety protocols.
- Record pre-flight and post-flight maintenance actions, diagnostics, and component replacements in the drone logbook.
- Role-play to report identified issues, such as calibration errors or system malfunctions, to the supervisor following escalation protocols.

#### **Classroom Aids:**

Training Kit (Trainer Guide, Presentations), Whiteboard, Markers, Notebooks, Pens, Laptop/Computer with an Internet connection, Speakers, Projector or Large screen.

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

Drone with 5G capability, Spare propellers, Drone battery packs, Battery charging station, Ground control software (laptop/tablet), Firmware update cables (USB/OTG), Multimeter, Compass and IMU calibration tools, Screwdriver set, Hex key set, Cleaning brush, Lint-free cloth, Compressed air canister, PPE (gloves, goggles, reflective vests, Safety boots), Maintenance logbook, Weather monitoring application, First aid kit.







# Module 4: Organise Work and Resources as per Health and Safety Standards

Mapped to NOS: TEL/N9101, v3.0

#### **Terminal Outcomes:**

- Demonstrate how to maintain an organised, clutter-free, and ergonomically safe workspace aligned with 5S and organisational SOPs.
- Apply standard health, safety, and environmental (HSE) practices, including hazard detection, PPE usage, and incident reporting as per workplace protocols.
- Use safe material handling, energy conservation techniques, and equipment maintenance procedures to ensure resource-efficient and risk-free operations.
- Perform systematic waste segregation and disposal in compliance with hazardous and e-waste guidelines.

Duration: 10:00	Duration: 10:00

#### **Theory – Key Learning Outcomes**

- Describe the principles and importance of 5S methodology for workplace organisation.
- Illuminate on the organisational SOPs related to workflow management, task allocation, and quality assurance.
- Comprehend health, safety, and environmental policies, including national/international standards like ISO 45001 and ISO 14001.
- Recognise common workplace hazards such as ESD, fire risks, electrical faults, and EMI interference, as well as their potential impacts.
- Discuss different types and correct uses of personal protective equipment (PPE) in a drone maintenance environment.
- Discuss various energy conservation practices relevant to lighting, HVAC, and equipment usage.
- Explain the role and benefits of digital tools for logging, task management, and inventory control in a workplace organisation.

#### **Practical – Key Learning Outcomes**

- Demonstrate how to organise and maintain a clean, clutter-free, and ergonomically safe workspace in compliance with 5S principles.
- Use digital platforms or apps to log work progress, record material consumption, and update task checklists accurately.
- Apply organisational SOPs to follow designated workflows and escalate delays or material shortages.
- Show correct selection, usage, and disposal of PPE while handling drones, tools, and hazardous materials.
- Role-play to report workplace hazards such as spills, loose wiring, or EMI sources in real time
- Perform safe lifting, equipment handling, and maintain correct posture during physical tasks to prevent injury.
- Conduct lockout/tagout procedures before servicing electrical or moving drone components.
- Demonstrate safe battery handling, charging, and storage processes using approved methods and equipment.
- Demonstrate safe manual handling techniques, workstation ergonomics, and







first aid basics for workplace injuries.

- Perform energy conservation actions such as switching off unused equipment and reporting any malfunctioning devices.
- Employ appropriate techniques to segregate and dispose of waste correctly into hazardous, recyclable, and e-waste bins following SOPs.
- Role-play effective communication of safety breaches, incidents, or health symptoms to supervisors or authorities promptly.

#### **Classroom Aids**

Training Kit (Trainer Guide, Presentations), Whiteboard, Markers, Notebooks, Pens, Laptop/Computer with an Internet connection, Speakers, Projector or Large screen.

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

ESD Wrist Straps, PPE (gloves, goggles, reflective vests, Safety boots), First Aid Kit, Waste Bins (Recyclable, Non-recyclable, Hazardous), Fire Extinguisher, Digital Logbook or Task Management App, Mobile/Tablet Device, Sample E-waste Materials, Cleaning Supplies, Tool Trolley, Lockout/Tagout equipment







## **Module 5: Interact Effectively with Team Members and Customers**

Mapped to NOS: TEL/N9102, v3.0

#### **Terminal Outcomes:**

- Demonstrate effective communication with supervisors, stakeholders, and team members using appropriate verbal, non-verbal, and digital tools.
- Collaborate with team members to resolve conflicts, support inclusivity, and achieve shared goals in hybrid or in-person work environments.
- Apply emotional intelligence and cultural sensitivity while interacting with customers, colleagues, and persons with disabilities (PwDs).
- Role-play workplace situations involving feedback reception, conflict de-escalation, and inclusive participation to build a respectful work culture.

Duration: 10:00	Duration: 10:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul> <li>Explain the organisational hierarchy and the roles and responsibilities of supervisors, team members, and stakeholders.</li> </ul>	<ul> <li>Demonstrate professional communication with supervisors or clients through various tools like email, chat, or virtual meetings.</li> </ul>
<ul> <li>Describe professional etiquette for verbal, non-verbal, and digital communication in face-to-face and remote settings.</li> </ul>	<ul> <li>Role-play a workplace situation where feedback is received and acted upon constructively to improve performance.</li> </ul>
<ul> <li>Explain the importance of clear communication, active listening, and timely information sharing at the workplace.</li> </ul>	<ul> <li>Apply emotional intelligence principles during group activities or customer interactions to build rapport and</li> </ul>
<ul> <li>List commonly used communication tools (e.g., emails, messaging apps, video conferencing platforms) and their features.</li> </ul>	<ul> <li>cooperation.</li> <li>Engage appropriate conflict resolution techniques to de-escalate disagreements and restore team harmony.</li> </ul>
<ul> <li>Explain methods for giving and receiving feedback constructively within a professional context.</li> <li>Identify common challenges faced by</li> </ul>	<ul> <li>Display inclusive behaviour, cultural sensitivity, and emotional intelligence while interacting with people from diverse backgrounds and PwDs.</li> </ul>
Persons with Disabilities (PwDs) and strategies for supporting them in the workplace.	<ul> <li>Role-play to collaborate with peers on group tasks, aligning with team goals while respecting individual contributions.</li> </ul>
<ul> <li>Summarise the legal and organisational policies on diversity, equity, and inclusion.</li> <li>Explain techniques for preventing and resolving conflicts through respectful</li> </ul>	<ul> <li>Conduct a virtual meeting adhering to digital etiquette, ensuring participation and accessibility for all.</li> </ul>
dialogue and escalation when necessary.	<ul> <li>Facilitate respectful team discussions where all voices are heard, and equal opportunity for input is maintained.</li> </ul>







#### **Classroom Aids**

Training Kit (Trainer Guide, Presentations), Whiteboard, Markers, Notebooks, Pens, Laptop/Computer with an Internet connection, Speakers, Projector or Large screen.

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

Feedback forms, Communication tool, etc.







# Module 6: DGT/VSQ/N0101: Employability Skills (30 Hours)

Man	datory Duration: 3	0:00			
Locati	Location: On-Site				
S.No.	Module Name	Key Learning Outcomes	Duration (hours)		
1.	Introduction to Employability Skills	Discuss the importance of Employability Skills in meeting the job requirements	1 Hour		
2.	Constitutional values - Citizenship	<ul> <li>Explain constitutional values, civic rights, duties, citizenship, responsibility towards society etc. that are required to be followed to become a responsible citizen.</li> <li>Show how to practice different environmentally sustainable practices</li> </ul>	1 Hour		
3.	Becoming a Professional in the 21st Century	<ul> <li>Discuss 21st century skills.</li> <li>Display positive attitude, self -motivation, problem solving, time management skills and continuous learning mindset in different situations.</li> </ul>	1 Hour		
4.	Basic English Skills	Use appropriate basic English sentences/phrases while speaking	2 Hours		
5.	Communication Skills	<ul> <li>Demonstrate how to communicate in a well - mannered way with others.</li> <li>Demonstrate working with others in a team</li> </ul>	4 Hours		
6.	Diversity & Inclusion	<ul> <li>Show how to conduct oneself appropriately with all genders and PwD</li> <li>Discuss the significance of reporting sexual harassment issues in time</li> </ul>	1 Hour		
7.	Financial and Legal Literacy	<ul> <li>Discuss the significance of using financial products and services safely and securely.</li> <li>Explain the importance of managing expenses, income, and savings.</li> <li>Explain the significance of approaching the concerned authorities in time for any exploitation as per legal rights and laws</li> </ul>	4 Hours		
8.	Essential Digital Skills	<ul> <li>Show how to operate digital devices and use the associated applications and features, safely and securely</li> <li>Discuss the significance of using internet for browsing, accessing social media platforms, safely</li> </ul>	3 Hours		







		and securely	
9.	Entrepreneurship	Discuss the need for identifying opportunities for potential business, sources for arranging money and potential legal and financial challenges	7 Hours
10.	Customer Service	<ul> <li>Differentiate between types of customers</li> <li>Explain the significance of identifying customer needs and addressing them</li> <li>Discuss the significance of maintaining hygiene and dressing appropriately</li> </ul>	4 Hours
11.	Getting ready for apprenticeship & Jobs	<ul> <li>Create a biodata</li> <li>Use various sources to search and apply for jobs</li> <li>Discuss the significance of dressing up neatly and maintaining hygiene for an interview</li> <li>Discuss how to search and register for apprenticeship opportunities</li> </ul>	2 Hours

SI 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







## **Module 7: On-the-Job Training**

Mapped to QP: TEL/Q6217, v3.0

Mandatory Duration: 150:00 Recommended Duration: 00:00

**Location: On-Site** 

#### **Terminal Outcomes**

- Demonstrate proper handling and basic assembly of drone components such as propellers, batteries, and payload modules.
- Demonstrate proper handling and basic assembly of drone components such as propellers, batteries, and payload modules.
- Perform pre-flight safety checks and drone readiness inspection as per SOPs.
- Apply basic troubleshooting techniques to identify and report drone hardware or software issues.
- Use digital tools or mobile apps to log drone operational status, flight hours, and maintenance records.
- Conduct routine battery inspection, charging, and safe storage practices.
- Assist in safe drone launch, monitoring, and landing under supervision.
- Perform basic cleaning and dust removal of drone sensors, camera modules, and airframes.
- Show how to track and update drone inventory using checklist formats or digital platforms, including spare parts and consumables.
- Demonstrate effective communication with supervisors regarding task status, issues, and handover notes.
- Use energy efficiently by switching off unused tools and following equipment handling best practices.
- Dispose of damaged batteries or e-waste in compliance with prescribed protocols.
- Demonstrate emotional intelligence and respectful conduct in interactions with colleagues and stakeholders.
- Role-play professional customer handling scenarios, especially in field operations or inspection missions.
- Exhibit appropriate responses to constructive feedback from supervisors or peers.
- Record issues, incidents, or delays during field missions in standard reporting formats.







## **Annexure**

## **Trainer Requirements (Drone Monitoring and Maintenance Associate)**

Trainer Prerequisites						
Minimum Educational Specialisa Qualification	Specialisation	Relevant Industry Experience		Training Experience		Remarks
		Years	Specialisation	Years	Specialisation	
Diploma after 12th Class	Telecom, Electronics, IT, Computer Science or UAV-related fields	2	Drone operations, Telecom infrastructure deployment, UAV-based monitoring or other relevant domains	1	NA	Eligible for ToT program
Graduate	Telecom, Electronics, IT, Computer Science or UAV-related fields	1	Drone operations, Telecom infrastructure deployment, UAV-based monitoring or other relevant domains	1	NA	Eligible for ToT program

Trainer Certification					
Domain Certification	Platform Certification				
Certified for Job Role " <b>Drone Monitoring and Maintenance Associate</b> ", "TEL/Q6217, v3.0", Minimum accepted score is 80%	Certified for Job Role: "Trainer (VET and Skills)", "MEP/Q2601" v3.0, Minimum accepted score as per MEPSC guidelines is 80%.				







## **Assessor Requirements (Drone Monitoring and Maintenance Associate)**

Assessor Prerequisites						
Minimum Educational Qualification	Specialisation	Relev	vant Industry Experience	Training/Assessment Experience		Remarks
		Years	Specialisation	Years	Specialisation	
Diploma after 12th Class	Telecom, Electronics, IT, Computer Science or UAV-related fields	5	Drone operations, Telecom infrastructure deployment, UAV-based monitoring or other relevant domains	4	NA	Eligible for ToT program
Graduate	Telecom, Electronics, IT, Computer Science or UAV-related fields	4	Drone operations, Telecom infrastructure deployment, UAV-based monitoring or other relevant domains	4	NA	Eligible for ToT program

Assessor Certification				
Domain Certification	Platform Certification			
Certified for Job Role " <b>Drone Monitoring and Maintenance Associate</b> ", "TEL/Q6217, v3.0", Minimum accepted score is 80%	Certified for Job Role: "Assessor (VET and Skills)", "MEP/Q2701" v3.0, Minimum accepted score as per MEPSC guidelines is 80%.			







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

Trainer Prerequisites						
Minimum Educational	Specialization	Relevant Industry Experience		Training Experience		Remarks
Qualification		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 communicatio n skills</li> <li>be well versed in English</li> </ul>
Certified current EEE trainers (155 hours)	from Management SSC (MEPSC)					<ul><li>have digital skills</li><li>have attention to detail</li></ul>
Certified Trainer	Qualification Pack: Trainer (MEP/Q0102)					<ul><li>be adaptable</li><li>have willingness to learn</li></ul>

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







### **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.
  - The 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 the 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 and 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.
  - An assessor must be ToA certified & the trainer must be ToT Certified.
  - The 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 the 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:
  - A surprise visit to the assessment location.
  - A 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.







## **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	A key learning outcome is a 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 upon the completion of the training.
Terminal Outcome	The terminal outcome is a statement of what a learner will know, understand and be able to do upon the completion of a module. A set of terminal outcomes help to achieve the training outcome.







Term	Description
NOS	National Occupational Standard (s)
NSQF	National Skills Qualifications Framework
OJT	On-the-job Training
QP	Qualifications Pack
PwD	People with Disability
PPE	Personal Protective Equipment