Model Curriculum

QP Name: Dron-O-Grapher

QP Code: TEL/Q6221

QP Version: 1.0

NSQF Level: 3

Model Curriculum Version: 1.0

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

Contents

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-2015/3431.9900
Minimum Educational Qualification and Experience	10th grade pass (or equivalent) OR 9th grade pass (with 1-year relevant experience) OR 8th grade pass (with 2-year relevant experience)
Pre-Requisite License or Training	NA
Minimum Job Entry Age	18 Years
Last Reviewed On	NA
Next Review Date	31.01.2027
NSQC Approval Date	31.01.2024
QP Version	1.0
Model Curriculum Creation Date	31.01.2024
Model Curriculum Valid Up to Date	31.01.2027
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 to:

- Demonstrate drone operations and its camera accessories
- Perform post processing and editing of photographs and footages
- Illustrate the process of maintenance and troubleshooting of drones.
- Define the use of drones in different other sectors.
- Explain the importance of organising work and resources as per health and Safety standards.
- Explain the importance of interacting effectively with team members and customers.

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
Bridge Module	**20:00**	**10:00**	**00:00**	**-**	**30:00**
Module 1: Introduction to the role of a Dron-o-Grapher	20:00	10:00	00:00	-	30:00
TEL/Q6263: Operate drone and camera accessories **NOS Version-1.0** **NSQF Level-3**	**20:00**	**40:00**	**30:00**	**-**	**90:00**
Module 2: Operate drone and camera accessories	20:00	40:00	30:00	-	90:00
TEL/Q6264: Perform post processing and editing of photographs and footages **NOS Version-1.0** **NSQF Level-3**	**10:00**	**50:00**	**30:00**	**-**	**90:00**
Module 3: Perform post processing and editing of photographs and footages	10:00	50:00	30:00	-	90:00
TEL/Q6265: Preventive maintenance and troubleshooting of drones and related accessories **NOS Version-1.0** **NSQF Level-3**	**20:00**	**40:00**	**30:00**	**-**	**90:00**

Module 4: Preventive maintenance and troubleshooting of drones and related accessories	20:00	40:00	30:00	-	90:00
TEL/Q6266: Use drone photography in various sectors **NOS Version-1.0** **NSQF Level-3**	**20:00**	**10:00**	**30:00**	**-**	**60:00**
Module 5: Use drone photography in various sectors	20:00	10:00	30:00	-	60:00
DGT/VSQ/N0102: Employability Skills (60 Hours) **NOS Version No. 1.0** **NSQF Level- 2**	**60:00**	**00:00**	**00:00**	**-**	**60:00**
Total Duration	**150:00**	**150:00**	**120:00**		**420:00**

Module Details

Module 1: Introduction to the role of a Dron-o-Grapher
Bridge Module

Terminal Outcomes:

- Discuss the job role of a Dron-o-Grapher.
- Explain the scope of work for a Dron-o-Grapher.

Duration: *20:00*	Duration: *10:00*
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
- Describe the size and scope of the Telecom industry and its sub-sectors. - Illustrate the drone technology. - Discuss the role and responsibilities of a Dron-o-Grapher. - Discuss the DGCA guidelines for drones. - Identify various employment opportunities for a Dron-o-Grapher. - Discuss the organisational policies on workplace ethics, managing sites, quality standards, personnel management and public relations (PR). - List the various daily, weekly, monthly operations/activities that take place at the site under a Dron-o-Grapher.	- Role play based on case studies, outlining the scope, responsibilities, and challenges of a Dron-o-Grapher. - Analyse the requirements for the course and prepare for the pre-requisites of the course.
Classroom Aids:	
Training Kit - Trainer Guide, Presentations, Whiteboard, Marker, Projector, Laptop, Video Films	
Tools, Equipment and Other Requirements	
NA	

Module 2: Operate drone and camera accessories
Mapped to NOS: TEL/N6263, v1.0

Terminal Outcomes:

- Describe the process of pre operations checks conducted before a drone flight.
- Illustrate the process of conducting flight operations of a drone.
- Demonstrate the process of Capture drone video and aerial photography.

Duration: 20:00	Duration: 40:00
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
- Describe the pre-flight checks required for a drone, including battery inspection, propeller examination, and control system testing. - Explain the importance of calibrating the drone's GPS and compass for accurate and reliable flight. - Discuss the significance of maintaining a clear and functional camera and gimbal for capturing high-quality footage. - Analyze the role of memory cards and storage devices in storing and managing drone footage. - Outline the components and functions of a remote controller, including control sticks, buttons, and switches. - Explain the importance of keeping the drone's firmware and companion software up to date for optimal performance. - Discuss the impact of weather conditions and advisories on safe drone operation. - Elaborate the process of powering on and off the drone and remote controller.	- Perform a pre-flight inspection of a drone, including checking the battery, propellers, and flight controls. - Calibrate the GPS and compass of a drone to ensure accurate positioning and navigation. - Inspect and adjust the camera and gimbal of a drone for proper alignment and functionality. - Insert and manage a memory card or storage device in the drone's camera. - Operate a remote controller and verify the responsiveness of control sticks, buttons, and switches. - Update the firmware and companion software of a drone and connected devices. - Analyze weather conditions and restrictions to determine the feasibility of drone flight. - Power on and off a drone and remote controller, following proper procedures. - Fly a drone in a controlled manner, maintaining stability, altitude, and situational awareness. - Use the camera controls on a drone's remote controller or mobile app to capture photos and record video. - Adjust camera settings, such as

resolution, frame rate, ISO, and white balance, to achieve desired outcomes.

- Frame shots using the live feed from the drone's camera and adjust drone position and orientation for composition.

- Capture smooth footage by maintaining controlled maneuvers and exploring different camera movements.

- Safely land a drone in a suitable landing zone, considering people and obstacles in the vicinity.

- Assess lighting conditions at a location to optimize camera settings and capture high-quality imagery.

Classroom Aids:

Training Kit - Trainer Guide, Presentations, Whiteboard, Marker, Projector, Laptop

Tools, Equipment and Other Requirements

Drones, Batteries (to power the drones) Propellers (for inspection and examination), Control system testing tools (such as software or diagnostic devices), GPS calibration equipment, Compass calibration equipment, Camera and gimbal inspection tools, Memory cards or storage devices, Remote controllers, Firmware and software update tools, Weather condition monitoring tools (such as meteorological instruments or apps), Power switches for drones and remote controllers, Suitable landing zones, Camera control features on remote controllers or mobile apps, Camera settings adjustment tools, Lighting assessment tools, Safety equipment (such as protective gear, first aid kits, fire extinguishers, etc.).
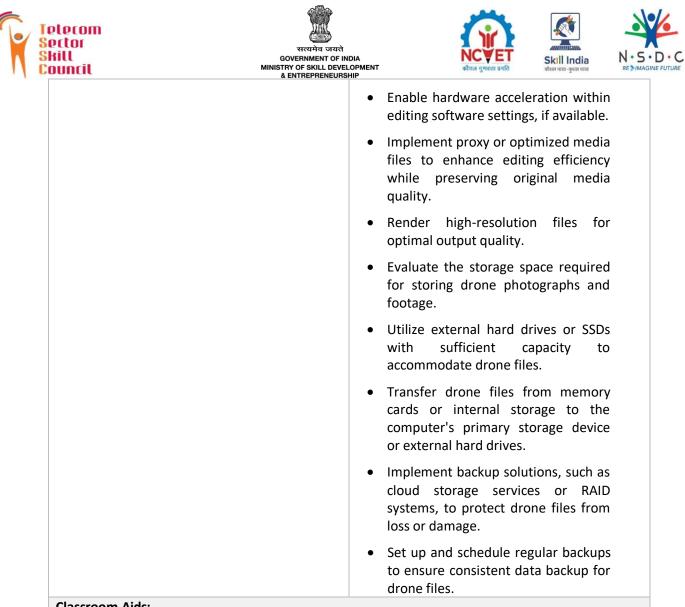
Module 3: Perform post processing and editing of photographs and footages
Mapped to NOS: TEL/N6264, v1.0

Terminal Outcomes:

- Describe the process of optimizing and maintaining editing workstations for drone media processing.
- Demonstrate the process of using image and video editing software that is captured from drones.
- Describe the importance of Storage and Backup Solutions.

Duration: 10:00	Duration: 50:00
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
- Define the essential computer settings that can be configured and fine-tuned to optimize performance for editing tasks. - Identify the minimum hardware requirements necessary for running resource-intensive editing software. - Explain the process of upgrading computer hardware to meet the specifications required for efficient editing. - Describe the importance of regularly updating the operating system, drivers, and editing software to ensure compatibility and performance. - Discuss the benefits of organizing files into a logical folder structure for efficient file management. - Compare and contrast different image and video editing software options based on their features and suitability for specific editing goals. - Explain the concept of hardware acceleration and its role in enhancing processing capabilities for editing tasks. - Discuss the importance of backing up drone files to protect against loss or damage.	- Configure and fine-tune computer settings to maximize performance for editing tasks. - Assess whether a computer meets the minimum requirements for running resource-intensive editing software. - Perform hardware upgrades on a computer to meet the required specifications for efficient editing. - Update the operating system, drivers, and editing software on a computer regularly. - Organize files into a logical folder structure for efficient file management. - Utilize hardware acceleration settings, such as GPU offloading, within editing software to enhance processing capabilities. - Install and set up different image and video editing software on a computer. - Utilize various editing features, such as color correction, filters and effects, cropping and resizing tools, stabilization, etc., to achieve desired editing goals. - Download and install editing software on a computer following the developer's instructions.

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	• Enable hardware acceleration within editing software settings, if available.
	• Implement proxy or optimized media files to enhance editing efficiency while preserving original media quality.
	• Render high-resolution files for optimal output quality.
	• Evaluate the storage space required for storing drone photographs and footage.
	• Utilize external hard drives or SSDs with sufficient capacity to accommodate drone files.
	• Transfer drone files from memory cards or internal storage to the computer's primary storage device or external hard drives.
	• Implement backup solutions, such as cloud storage services or RAID systems, to protect drone files from loss or damage.
	• Set up and schedule regular backups to ensure consistent data backup for drone files.

Classroom Aids:

Training Kit - Trainer Guide, Presentations, Whiteboard, Marker, Projector, Laptop

Tools, Equipment and Other Requirements

Editing software (e.g., Adobe Premiere Pro, Final Cut Pro, DaVinci Resolve), Resource-intensive editing software, Hardware upgrade components (such as RAM, graphics card, storage devices), Operating system updates, Driver updates, File organization software or tools, Image and video editing software (e.g., Adobe Photoshop, Lightroom, After Effects), Backup solutions (e.g., external hard drives, cloud storage), Storage devices (internal or external hard drives, SSDs), Memory cards (for transferring drone files), Primary storage devices (internal hard drives), Proxy or optimized media files (to enhance editing efficiency), RAID systems (for data redundancy and protection), Backup scheduling tools or software, Training materials and resources (documentation, tutorials, sample files), Projectors or display screens for presentations, Internet connectivity (for software downloads, updates, and online resources), Training room or space with suitable seating arrangements, Writing materials (pens, paper), Audiovisual equipment (microphones, speakers)

Module 4: Preventive maintenance and troubleshooting of drones and related accessories
Mapped to NOS: TEL/N6265, v1.0

Terminal Outcomes:

- Describe the drone related issues.
- Demonstrate the steps to repair and maintain a drones
- Illustrate the process of repairing and maintaining different drone accessories.

Duration: 20:00	Duration: 40:00
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
- Define the potential signs of abnormal behavior, error messages, and visual cues exhibited by a drone or its accessories that may indicate issues or malfunctions. - Explain the importance of analyzing flight logs to gain insights into a drone's performance, including flight parameters and any recorded errors. - Discuss the various sources of troubleshooting guides and common issues related to specific drone models, such as user manuals, manufacturer websites, and online forums. - Describe the process of calibrating utilities, sensor status indicators, or connectivity testers of drones for optimal performance. - Explain the importance of regular preventive maintenance tasks recommended by manufacturers, including cleaning, inspection, firmware updates, and battery health checks. - Describe a systematic approach for troubleshooting and isolating the root cause of problems in drones and their accessories. - Understand the functional interdependencies between different drone components, such as	- Analize abnormal behavior, error messages, and visual cues exhibited by a drone or its accessories. - Analyze flight logs to extract and interpret performance data from drones. - Navigate user manuals, manufacturer websites, and online forums to access troubleshooting guides and common issues specific to drone models. - Calibrate utilities, sensor status indicators, or connectivity testers of drones as part of practical training exercises. - Perform preventive maintenance tasks on drones, including cleaning, inspection, and firmware updates, during practical training sessions. - Utilize a systematic approach to troubleshoot and identify the root cause of problems in drones and their accessories. - Practice proper cleaning techniques for drones and their accessories, including using a soft brush or compressed air to remove debris. - Update drone firmware following the manufacturer's guidelines during practical training exercises. - Calibrate drones' sensors, compass,

frames, motors, propellers, batteries, cameras, gimbals, and additional accessories.	and gimbals under the guidance of instructors during hands-on training.
	• Identify and replace faulty parts of drones and their accessories after inspection and diagnosis.
	• Inspect batteries regularly for signs of damage or swelling and replace them if necessary, during practical training sessions.
	• Conduct visual inspections of drone accessories, such as propellers, chargers, remote controllers, camera gimbals, and ND filters, for signs of damage, wear, or malfunction.
	• Calibrate camera gimbals to ensure proper operations during practical training exercises.

Classroom Aids:

Training Kit - Trainer Guide, Presentations, Whiteboard, Marker, Projector, Laptop

Tools, Equipment and Other Requirements

Drones, Drone accessories (propellers, batteries, chargers, gimbals, ND filters, etc.), Flight logs (to analyze drone performance data), User manuals (for troubleshooting guides and information on specific drone models), Manufacturer websites (for accessing documentation and resources), Online forums (for community support and discussions), Calibration utilities or tools (for sensor status indicators, connectivity testers), Maintenance tools (such as soft brushes, compressed air, screwdrivers), Firmware update tools (specific to drone models), Visual inspection tools (to identify damage or malfunction), Spare parts (for replacement during practical training sessions), Battery health check tools (to assess battery condition), Instructional materials (documentation, tutorials, sample flight logs), Projectors or display screens for presentations, Training room or space with suitable seating arrangements, Writing materials (pens, paper), Audiovisual equipment (microphones, speakers), Internet connectivity (for accessing online resources and forums), Computer or laptop (for analyzing flight logs and accessing digital resources), Flight simulators (for virtual training exercises)

Module 5: Use drone photography in various sectors
Mapped to NOS: TEL/N6266, v1.0

Terminal Outcomes:

- Describe the use of drones in real estate.
- Discuss the application of drones in agriculture.
- Recognize the use of drones in media and journalism industry.
- Illustrate the application of drones in tourism and hospitality industry.

Duration: 20:00	Duration: 10:00
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
- Define the key considerations for capturing high-quality aerial photographs of real estate properties, including property features, surrounding landscapes, and amenities. - Describe the techniques for capturing wide-angle shots or panoramic views of real estate properties to provide comprehensive overviews. - Discuss the techniques for capturing smooth and cinematic footage, incorporating transitions, and adding music or voiceovers to create engaging real estate videos. - Describe the process of operating a drone equipped with a camera for capturing high-resolution aerial photographs of agricultural fields and crops. - Explain the importance of understanding drone controls, camera settings, and flight techniques for obtaining clear and well-composed images. - Explain the process of interpreting aerial imagery and correlating visual cues with agronomic knowledge to make informed decisions. - Discuss the planning and execution of efficient flight paths over agricultural fields, considering factors such as field size, crop type,	- Analize the process to capture high-quality aerial photographs of real estate properties during hands-on training sessions. - Utilize drone photography techniques to emphasize key features of a property and create visually appealing images in practical training exercises. - Capture wide-angle shots or panoramic views of real estate properties to provide comprehensive overviews during practical training sessions. - Edit drone photographs to enhance their visual appeal and showcase properties effectively in practical training exercises. - Create captivating drone videos of real estate properties, incorporating exterior and interior spaces, amenities, and landscapes, during hands-on training. - Operate a drone equipped with a camera to capture high-resolution aerial photographs of agricultural fields and crops during practical training sessions. - Analyze aerial imagery to assess crop health, identify stress or diseases, monitor nutrient deficiencies, and evaluate overall crop conditions in practical training exercises.

and desired image resolution.

- Discuss the integration of aerial imagery data into existing farm management systems or precision agriculture platforms.

- Discuss the techniques for capturing aerial shots that provide a broader perspective, highlight scale, showcase geographical features, or reveal unique angles.

- Explain the use of drone photography in showcasing tourist destinations, hotels, and resorts, including amenities and appealing features.

- Discuss the use of drone photography in creating engaging promotional content, including videos and images, for marketing campaigns and various media channels.

- Describe the inspection process for power lines, transmission towers, and energy infrastructure using drone technology.

- Apply knowledge of drone operation to proficiently navigate through challenging terrains, varying weather conditions, and complex environments.

- Evaluate the advanced imaging capabilities of drones in the context of search and rescue missions.

- Plan and execute efficient flight paths over agricultural fields considering factors such as field size, crop type, and desired image resolution during hands-on training.

- Integrate remote sensing technologies, such as multispectral or thermal cameras, into drone platforms for agricultural applications in practical training exercises.

- Interpret color variations, vegetation indices, and other data layers to assess crop vigor, growth patterns, or pest infestations during practical training sessions.

- Integrate aerial imagery data into existing farm management systems or precision agriculture platforms in practical training exercises.

- Operate a drone to capture high-quality aerial footage of news events, social issues, natural disasters, or other relevant subjects during hands-on training.

- Capture aerial shots that provide a broader perspective, highlight scale, showcase geographical features, or reveal unique angles during practical training sessions.

- Utilize drone photography to showcase tourist destinations, hotels, and resorts, including amenities and appealing features, in practical training exercises.

- Use drone photography to create engaging promotional content, including videos and images, for marketing campaigns, websites, social media, and brochures during hands-on training.

Classroom Aids:

Training Kit - Trainer Guide, Presentations, Whiteboard, Marker, Projector, Laptop, Video Films

Tools, Equipment and Other Requirements
Drones, Drone accessories (propellers, batteries, chargers, gimbals, ND filters, etc.), Flight logs (to analyze drone performance data), User manuals (for troubleshooting guides and information on specific drone models), Manufacturer websites (for accessing documentation and resources), Online forums (for community support and discussions), Calibration utilities or tools (for sensor status indicators, connectivity testers), Maintenance tools (such as soft brushes, compressed air, screwdrivers), Firmware update tools (specific to drone models), Visual inspection tools (to identify damage or malfunction), Spare parts (for replacement during practical training sessions), Battery health check tools (to assess battery condition), Instructional materials (documentation, tutorials, sample flight logs), Projectors or display screens for presentations, Training room or space with suitable seating arrangements, Writing materials (pens, paper), Audiovisual equipment (microphones, speakers), Internet connectivity (for accessing online resources and forums), Computer or laptop (for analyzing flight logs and accessing digital resources), Flight simulators (for virtual training exercises)

Module 6: Employability Skills (60 Hours)
Mapped to NOS: DGT/VSQ/N0102

S.No.	Module Name	Key Learning Outcomes	Duration(hours)
	Mandatory Duration: 60:00		
	Location: On-Site		
1.	Introduction to Employability Skills	• Discuss the Employability Skills required for jobs in various industries • List different learning and employability related GOI and private portals and their usage	1.5 Hours
2.	Constitutional values - Citizenship	• Explain the constitutional values, including civic rights and duties, citizenship, responsibility towards society and personal values and ethics such as honesty, integrity, caring and respecting others that are required to become a responsible citizen • Show how to practice different environmentally sustainable practices.	1.5 Hours
3.	Becoming a Professional in the 21st Century	• Discuss 21st century skills. • Display positive attitude, self - motivation, problem solving, time management skills and continuous learning mindset in different situations.	1 Hours
4.	Basic English Skills	• Use appropriate basic English sentences/phrases while speaking	2 Hours
5.	Communication Skills	• Demonstrate how to communicate in a well - mannered way with others. • Demonstrate working with others in a team	4 Hour
6.	Diversity & Inclusion	• Show how to conduct oneself appropriately with all genders and PwD • Discuss the significance of reporting sexual harassment issues in time	1 Hour
7.	Financial and Legal Literacy	• Discuss the significance of using financial products and services safely and securely. • Explain the importance of managing expenses, income, and savings. • Explain the significance of approaching the concerned authorities in time for any exploitation as per legal rights and laws	4 Hours

8.	Essential Digital Skills	• Show how to operate digital devices and use the associated applications and features, safely and securely • Discuss the significance of using internet for browsing, accessing social media platforms, safely and securely	3 Hours
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	• Differentiate between types of customers • Explain the significance of identifying customer needs and addressing them • Discuss the significance of maintaining hygiene and dressing appropriately	4 Hours
11.	Getting ready for apprenticeship & Jobs	• Create a biodata • Use various sources to search and apply for jobs • Discuss the significance of dressing up neatly and maintaining hygiene for an interview • Discuss how to search and register for apprenticeship opportunities	2 Hours

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: Above Tools &Equipment not required, if Computer LAB is available in the institute.		

Module 7: On-the-Job Training
Mapped to Dron-o-Grapher

Mandatory Duration: *120:00*	Recommended Duration: *00:00*
Module Name: On-the-Job Training **Location: On Site**	

Terminal Outcomes

1. Perform a pre-flight inspection of a drone, including checking the battery, propellers, and flight controls.

2. Calibrate the GPS and compass of a drone to ensure accurate positioning and navigation.

3. Inspect and adjust the camera and gimbal of a drone for proper alignment and functionality.

4. Fly a drone in a controlled manner, maintaining stability, altitude, and situational awareness.

5. Use the camera controls on a drone's remote controller or mobile app to capture photos and record video.

6. Adjust camera settings, such as resolution, frame rate, ISO, and white balance, to achieve desired outcomes.

7. Frame shots using the live feed from the drone's camera and adjust drone position and orientation for composition.

8. Capture smooth footage by maintaining controlled maneuvers and exploring different camera movements.

9. Safely land a drone in a suitable landing zone, considering people and obstacles in the vicinity.

10. Assess lighting conditions at a location to optimize camera settings and capture high-quality imagery.

Annexure

Trainer Requirements

<table>
<tr><th colspan="8">Trainer Prerequisites</th></tr>
<tr><td rowspan="2">Minimum Educational Qualification</td><td rowspan="2">Specialization</td><td colspan="2">Relevant Industry Experience</td><td colspan="2">Training Experience</td><td rowspan="2">Remarks</td></tr>
<tr><td>Years</td><td>Specialization</td><td>Years</td><td>Specialization</td></tr>
<tr><td>Diploma in any field</td><td>NA</td><td>4</td><td>Drone Technology</td><td>0</td><td>NA</td><td>Eligible for ToT program</td></tr>
<tr><td>Graduate</td><td>NA</td><td>1</td><td>Drone Technology</td><td>0</td><td>NA</td><td>Eligible for ToT program</td></tr>
</table>

<table>
<tr><th colspan="2">Trainer Certification</th></tr>
<tr><th>Domain Certification</th><th>Platform Certification</th></tr>
<tr><td>Job Role "Dron-o-Grapher", "TEL/Q6221, v1.0", Minimum accepted score is 80%.</td><td>Trainer is certified for the job role "Trainer (VET & SKILLS)"; mapped to Qualification Pack: - "MEP/Q2601, v2.0" with minimum 80% of score.</td></tr>
</table>

Assessor Requirements

Assessor Prerequisites						
Minimum Educational Qualification	Specialization	Relevant Industry Experience		Training Experience		Remarks
		Years	Specialization	Years	Specialization	
Diploma in any field	NA	4	Drone Technology	0	NA	Eligible for ToT program
Graduate	NA	1	Drone Technology	0	NA	Eligible for ToT program

Assessor Certification	
Domain Certification	**Platform Certification**
Job Role "**Dron-o-Grapher**", "TEL/Q6221, v1.0", Minimum accepted score is 80%	Assessor is certified for the job role **"Assessor (VET & SKILLS)"**; mapped to Qualification Pack: - "MEP/Q2701, v2.0" with minimum 80% of score.

Trainer Requirements (Employability Skills 60 hours)

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

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

Master Trainer Requirements (Employability Skills 60 hours)

Master Trainer Prerequisites						
Minimum Educational Qualification	Specialization	Relevant Industry Experience		Training Experience		Remarks
		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 trainer should: • have good communication skills • be well versed in English • have digital skills • have attention to detail • be adaptable • have willingness to learn
Certified Master Trainer	Qualification Pack: Master Trainer			3	EEE training of Management SSC (MEPSC) (155 hours)	

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

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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 60 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	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.

Acronyms and Abbreviations

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