

QUALIFICATION FILE

Drone Software Technician

- ☒ Short Term Training (STT) ☐ Long Term Training (LTT) ☐ Apprenticeship
☒ Upskilling ☐ Dual/Flexi Qualification ☐ For ToT
☐ For ToA

- ☐ General ☐ Multi-skill (MS) ☐ Cross Sectoral (CS) ☒ FutureSkills ☐ OEM

NCrF/NSQF Level: 4

Submitted By:

IT-ITes Sector Skills Council NASSCOM (SSC NASSCOM)

Plot No. – 7, 8, 9 & 10

Sector – 126, Noida, Uttar Pradesh - 201303

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Section 1: Basic Details

1.	Qualification Name	Drone Software Technician	
2.	Sector/s	IT/ITeS	
3.	Type of Qualification: ☐ New ☒ Revised ☐ Has Electives/Options ☐ OEM	NQR Code & version of the existing /previous qualification: QG-04-IT-01855-2024-V1.1-NASSCOM & Version 2	Qualification Name of the existing/previous version: Drone developer (Software)
4.	a. OEM Name b. Qualification Name (Wherever applicable)	Drone Software Technician	
5.	National Qualification Register (NQR) Code &Version (Will be issued after NSQC approval)	QG-04-IT-04332-2025-V2-NASSCOM & Version 3	6. NCrF/NSQF Level: 4
7.	Award (Certificate/Diploma/Advance Diploma/ Any Other (Wherever applicable specify multiple entry/exits also & provide details in annexure)	Certificate	
8.	Brief Description of the Qualification	The drone software technician will collaborate with stakeholders to document functional and non-functional requirements, create architectural diagrams that outline software structure, and design algorithms for navigation and flight control. . The technician will utilize simulation tools to test algorithms and validate software performance in controlled environments before conducting real-world flight tests. Thorough documentation of code and preparing software for deployment will also be key responsibilities, alongside updating it based on user feedback and technological advancements.	
9.	Eligibility Criteria for Entry for a Student/Trainee/Learner/Employee	Entry Qualification & Relevant Experience: *Relevant Experience in job roles related to Computer Programming/AI/IT/Analytics/Computer Science The relevant experience would include work, internship, and apprenticeship after completing relevant educational qualifications. **Relevant educational	

		<table border="1"> <tr> <th>S. No.</th><th>Academic/Skill Qualification (with Specialization - if applicable)</th><th>Required Experience (with Specialization - if applicable)</th></tr> <tr> <td>1</td><td>12th Grade Pass in STEM</td><td>-</td></tr> <tr> <td>2</td><td>10th Grade Pass</td><td>1.5 Years of relevant experience*</td></tr> <tr> <td>3</td><td>Previous Relevant qualification of NSQF level 3</td><td>3 years of relevant experience*</td></tr> </table> Min Age: NA	S. No.	Academic/Skill Qualification (with Specialization - if applicable)	Required Experience (with Specialization - if applicable)	1	12th Grade Pass in STEM	-	2	10th Grade Pass	1.5 Years of relevant experience*	3	Previous Relevant qualification of NSQF level 3	3 years of relevant experience*							
S. No.	Academic/Skill Qualification (with Specialization - if applicable)	Required Experience (with Specialization - if applicable)																			
1	12th Grade Pass in STEM	-																			
2	10th Grade Pass	1.5 Years of relevant experience*																			
3	Previous Relevant qualification of NSQF level 3	3 years of relevant experience*																			
10.	Credits Assigned to this Qualification, Subject to Assessment (as per National Credit Framework (NCrF))	13 Credits	11. Common Cost Norm Category (I/II/III) (wherever applicable): II																		
12.	Any Licensing Requirements for Undertaking Training on This Qualification (wherever applicable)	NA																			
13.	Training Duration by Modes of Training Delivery (Specify Total Duration as per selected training delivery modes and as per requirement of the qualification)	☐ Offline Only ☐ Online Only ☒ Blended																			
		<table border="1"> <tr> <th>Training Delivery Mode</th><th>Theory (Hours)</th><th>Practical (Hours)</th><th>OJT (Mandatory) Hours</th><th>OJT (Recommended) Hours</th><th>Total (Hours)</th></tr> <tr> <td>Classroom (offline)</td><td>116</td><td>184</td><td>90</td><td>-</td><td>390</td></tr> <tr> <td>Online</td><td>116</td><td>184</td><td>90</td><td>-</td><td>390</td></tr> </table>		Training Delivery Mode	Theory (Hours)	Practical (Hours)	OJT (Mandatory) Hours	OJT (Recommended) Hours	Total (Hours)	Classroom (offline)	116	184	90	-	390	Online	116	184	90	-	390
Training Delivery Mode	Theory (Hours)	Practical (Hours)	OJT (Mandatory) Hours	OJT (Recommended) Hours	Total (Hours)																
Classroom (offline)	116	184	90	-	390																
Online	116	184	90	-	390																
		(Refer Blended Learning Annexure for details)																			
14.	Aligned to NCO/ISCO Code/s (if no code is available mention the same)	NCO- 2015/NIL																			
15.	Progression Path After Attaining the Qualification, wherever applicable (Please show Professional and Academic progression)	This entry should refer to one or more of the following: Professional progression: access to related qualification(s) at the next NSQF level – Application Developer etc. Academic progression: access to related qualification (s) at the next NSQF level – Flight test operator, etc.																			

16.	Other Indian languages in which the Qualification & Model Curriculum are being submitted	Hindi	
17.	Is similar Qualification(s) available on NQR-if yes, justification for this qualification	☐ Yes ☒ No URLs of similar Qualifications:	
18.	Is the Job Amenable to Persons with Disability	☒ Yes ☐ No If "Yes", specify applicable type of Disability: Visual, Hearing or Speech impairment, Locomotor Disability	
19.	How will participation of women be encouraged?	The Program is gender neutral although to increase women's participation, organizations are keeping aside a few seats to encourage female candidates.	
20.	Are Greening/Environment Sustainability Aspects covered (Specify the NOS/Module which Covers it)	☒ Yes ☐ No: DGT/VSQ/N0102 Employability Skill (60 Hours)	
21.	Is Qualification suitable to be offered in Schools/Colleges	Schools: ☒ Yes ☐ No Colleges ☒ Yes ☐ No	
22.	Name and Contact Details Submitting / Awarding Body SPOC (In case of CS or MS, provide details of both Lead AB & Supporting ABs)	Name: Namrata Kapur Email: Standards@nasscom.in Contact No.: 0120-4990111 Website: https://www.sscnasscom.com/	
23.	Final Approval Date by NSQC: 08/05/2025	24. Validity Duration: 3 Years	25. Next Review Date: 08/05/2028

Section 2: Module Summary

NOS/s of Qualifications

(In exceptional cases these could be described as components)

Mandatory NOS/s:

Specify the training duration and assessment criteria at NOS/ Module level. For further details refer curriculum document.

Th.-Theory **Pr.**-Practical **OJT**-On the Job **Man.**-Mandatory Training **Rec.**-Recommended **Proj.**-Project

S. No	NOS/Module Name	NOS/Module Code & Version (if applicable)	Core/ Non-Core	NCrF/NSQF Level	Credits as per NCrF	Training Duration (Hours)					Assessment Marks					
						Th.	Pr.	OJT-Man.	OJT-Rec.	Total	Th.	Pr.	Proj.	Viva	Total	Weightage (%) (if applicable)
1.	Design the software for the Drone system	SSC/N8435 V3.0	Core	4	06	52:00	68:00	60:00	00:00	180:00	30	50	-	20	100	40
2.	Conduct thorough testing of drone system software in both simulated environments and real-world scenarios to ensure reliability and safety.	SSC/N8436 V3.0	Core	4	05	40:00	80:00	30:00	00:00	150:00	30	50	-	20	100	40
3.	Employability Skill (60 Hours)	DGT/VSQ/N0102 V1.0	Non-Core	4	02	24:00	36:00	00:00	00:00	60:00	20	30	-	-	50	20
Duration (in Hours)/Total Marks					13	116:00	184:00	90:00	00:00	390:00	80	130	-	40	250	100

Elective NOS/s:

S. No	NOS/Module Name	NOS/Module Code & Version (if applicable)	Core/ Non-Core	NCrF/NSQF Level	Credits as per NCrF	Training Duration (Hours)					Assessment Marks					
						Th.	Pr.	OJT-Man.	OJT-Rec.	Total	Th.	Pr.	Proj.	Viva	Total	Weightage (%) (if applicable)
1.																
2.																
Duration (in Hours) / Total Marks																

Optional NOS/s:

S. No	NOS/Module Name	NOS/Module Code & Version (if applicable)	Core/Non-Core	NCrF/NS QF Level	Credits as per NCrF	Training Duration (Hours)					Assessment Marks					
						Th.	Pr.	OJT-Man.	OJT-Rec.	Total	Th.	Pr.	Proj.	Viva	Total	Weightage (%) (if applicable)
1.																
2.																
Duration (in Hours) / Total Marks																

Assessment - Minimum Qualifying Percentage

Please specify **any one** of the following:

Minimum Pass Percentage – Aggregate at qualification level: 70% (Every Trainee should score specified minimum aggregate passing percentage at qualification level to successfully clear the assessment.)

Minimum Pass Percentage – NOS/Module-wise: ____% (Every Trainee should score specified minimum passing percentage in each mandatory and selected elective NOS/Module to successfully clear the assessment.)

Section 3: Training Related

1.	Trainer's Qualification and experience in the relevant sector (in years) (as per NCVET guidelines)	Educational Qualification: Graduate (Engineering/ Technology/ Computer Science) Industry & training experience: 2 years of industry experience in drone technology. The industry experience would include work, internship, and apprenticeships undertaken after regular graduation. Certification: "Trainer" mapped to the Qualification Pack "MEP/Q2601" Minimum accepted score is 80% aggregate
2.	Master Trainer's Qualification and experience in the relevant sector (in years) (as per NCVET guidelines)	Educational Qualification: Graduate (Engineering/ Technology/ Computer Science) Industry & training experience: 4 years of industry experience in drone technology. The full-time experience would include work, internship, and apprenticeships undertaken after regular graduation.

		Certification: “Master Trainer” mapped to the Qualification Pack “MEP/Q2602” Minimum accepted score is 90% aggregate.
3.	Tools and Equipment Required for the Training	☒ Yes ☐ No (If “Yes”, details to be provided in Annexure)
4.	In Case of Revised Qualification, details of Any Upskilling Required for Trainer	NA

Section 4: Assessment Related

1.	Assessor’s Qualification and experience in relevant sector (in years) (as per NCVET guidelines)	Educational Qualification: Graduate (Engineering/ Technology/ Computer Science) Industry & Training Experience: 2 years of industry experience in drone technology. The full-time experience would include work, internship, and apprenticeship undertaken after regular graduation. Certification: “Assessor” mapped to the Qualification Pack “MEP/Q2701” Minimum accepted score is 80% aggregate.
2.	Proctor’s Qualification and experience in relevant sector (in years) (as per NCVET guidelines), (wherever applicable)	Educational Qualification: Graduate (Engineering/ Technology/ Computer Science) Industry & Training Experience: 2 years of industry experience in drone technology. The full-time experience would include work, internship, and apprenticeship undertaken after regular graduation. Certification: “Assessor” mapped to the Qualification Pack “MEP/Q2701” Minimum accepted score is 80% aggregate.
3.	Lead Assessor’s/Proctor’s Qualification and experience in relevant sector (in years) (as per NCVET guidelines)	Educational Qualification: Graduate (Engineering/ Technology/ Computer Science) Industry & Training Experience: 4 years of industry experience in drone technology. The full-time experience would include work, internship, and apprenticeship undertaken after regular graduation. Certification: “Lead Assessor” mapped to the Qualification Pack “MEP/Q2702” Minimum accepted score is 90% aggregate.
4.	Assessment Mode (Specify the assessment mode)	The assessment will consist of a blend of hands-on practical evaluations, viva-voce, and online proctored scenario-based multiple-choice questions ensuring a thorough evaluation of the individual's proficiency in learning outcomes, practical understanding, and real-world application of concepts.

5.	Tools and Equipment Required for Assessment	☒ Same as for training ☐ Yes ☐ No <i>(details to be provided in Annexure-if it is different for Assessment)</i>
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Section 5: Evidence of the Need for the Qualification

Provide Annexure/Supporting documents name.

1.	Latest Skill Gap study (not older than 2 years) (Yes/No): NA
2.	Latest Market Research Reports or any other source (not older than 2 years) (Yes/No): NA
3.	Government/Industry initiatives/requirement (Yes/No): NA
4.	Number of industry validations provided: 11
5.	Estimated number of people to be trained and employed: NA
6.	Evidence of Concurrence/Consultation with Line/State Departments: NA If "No", why:

Section 6: Annexure & Supporting Documents Check List

Specify Annexure Name / Supporting document file name

1.	Annexure: NCrf/NSQF level justification based on NCrf/NSQF descriptors <i>(Mandatory)</i>	Evidence of Level
2.	Annexure: List of tools and equipment relevant for NOS <i>(Mandatory, except in case of online course)</i>	Tools and Equipment (lab set-up)
3.	Annexure: Detailed Assessment criteria <i>(Mandatory)</i>	Performance Criteria Details
4.	Annexure: Assessment Strategy <i>(Mandatory)</i>	Assessment Strategy
5.	Annexure: Blended Learning <i>(Mandatory, in case selected Mode of delivery is Blended Learning)</i>	NA

6.	Annexure: Multiple Entry Exit Details <i>(Mandatory, in case qualification has multiple entry-exit)</i>	NA
7.	Annexure: Acronym and Glossary <i>(Optional)</i>	NA
8.	Supporting Document: Model Curriculum <i>(Mandatory-Public View)</i>	MC_SSC/Q8406_Drone Software technician_V3.0
9.	Supporting Document: Career Progression <i>(Mandatory-Public View)</i>	NA
10.	Supporting Document: Occupational Map <i>(Mandatory)</i>	OM_Drone Technology
11.	Supporting Document: Assessment SOP <i>(Mandatory)</i>	Assessment Strategy
12.	Any Other document you wish to submit:	NA

Annexure: Evidence of Level

NCrF/NSQF Level Descriptors	Key requirements of the job role/ outcome of the qualification	How the job role/ outcomes relate to the NCrF/NSQF level descriptor	NCrF/NSQF Level
Process	- Understand the drone system and its various parameters - Identify various types of data sets and already determined data - Plan and organize the data to develop a drone model - Prepare a prototype of the drone model - Prepare algorithms to improve structure of the data - Create a programming script for the drone operations - Upload the available data sets to conduct simulated experiments - Upload the correct script and run in the autopilot system - Monitor the performance of the drone through the control software - Consider different scenarios and run test cases	The individual in this role must work in a well-structured, supervised environment where he/she needs to deliver reliable performance on tasks assigned to them. He/she should know how to plan and organize their daily activities	4

NCrF/NSQF Level Descriptors	Key requirements of the job role/ outcome of the qualification	How the job role/ outcomes relate to the NCrF/NSQF level descriptor	NCrF/NSQF Level
Professional knowledge	- Knowledge of different types of drones and its use cases - Knowledge of LUA Programing language for on-board software development - Different data sources, formats and how to access documents and information from data sources - Knowledge of programming languages such as Java, C++, Python, R, SQL, Markdown - Knowledge of opensource drone software such as Ardupilot, PX4, QGroundControl, etc - Knowledge of MAVLink protocol - Knowledge of organizational policies, procedures and guidelines which relate to drone operations - Knowledge of drone kit library - Knowledge of how to model Simulink	The individual in the role needs to have a basic understanding of drone concepts, drone system and know some programming languages such as python, C++, know how an opensource toolkit works and more specifically, understand how the datasets can be leveraged to train the models and run test cases.	4
Professional skill	- Define roadmap for building prototypes - Identify the different trends in drone development and present opinions to supervisors - Know the specifications of PID in quadcopter - Identify errors and suggest possible solutions to the management - Quantify drone aspects related to acceleration, velocity, path, etc. - Operate MAVProxy to command the drone from ground control station	The role demands a skillset that enables the individual to conduct drone operations in a simulated environment. To do so, the individual needs to have high attention to detail, persistence, motivation, and ability to consistently form and apply mental models.	4
Core skill	- Identify and analyze data to create reports and documentation - Understand software and its varied requirements - Read and interpret datasheets - Work in collaboration with stakeholders to build the product - Apply balanced judgments to different situations	To perform his/her role effectively, the individual should know how to read and interpret data, needs to be a good analytical thinker, can clearly explain your thought process, have a great attention to details and needs to plan and organize his/her work effectively to achieve targets.	4

NCrF/NSQF Level Descriptors	Key requirements of the job role/ outcome of the qualification	How the job role/ outcomes relate to the NCrF/NSQF level descriptor	NCrF/NSQF Level
Responsibility	- Follow rule-based decision-making processes. - Complete accurate well written work with attention to detail. - Plan and organize your own work to achieve targets and deadlines - Provide suggestions on suitable courses. - Present actionable information to the right person, and at the right time - Take corrective action leading to performance improvements - Work effectively in a team environment	The role also requires the individual to work with and support teams that are responsible for the development and deployment of the model. He/she should follow all the policies and procedures that the process demands. He/she should get their work checked by their supervisors.	4

Annexure: Tools and Equipment (lab set-up)

Batch Size:

S. No.	Tool / Equipment Name	Specification	Quantity for specified Batch size
1	PC/Laptop with internet	-	1 Unit per Trainee
2	Integrated Development Environment (IDE)	Visual Studio Code or Eclipse for coding (supports multiple programming languages). Arduino IDE for coding microcontroller-based projects	1 Unit per Trainee
3	Programming Languages	C++, Python	Access to Each System
4	Simulation Software	Gazebo,AirSim,Matlab etc.	Access to Each System
5	Version control	Git	Access to Each System
6	Documentation Tools	Markdown editors ,Latex etc.	Access to Each System
7	Diagramming and Design Tools	Lucid Chart, Visio etc.	Access to Each System
8	Testing Tools	ROS,Unit testing frameworks like Google test	Access to Each System
9	Hardware	Development Boards (Arduino or Raspbarry Pi)	Access to Each System

		- Drones (Programbale Drone) - Sensors (Basic sensors like accelerometers, gyroscopes, and GPS modules etc.)	
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Classroom Aids

The aids required to conduct sessions in the classroom are:

1. White Board
2. White Board Marker
3. Projector
4. Sketch pens & Chart papers

Annexure: Industry Validations Summary

Provide summary information of all the industry validation in table.

S. No	Organization Name	Representative Name	Designation	Contact Address	Contact Phone No	E-mail ID	LinkedIn Profile (if available)
1	Infosys	Vivek Pilaniya	Program Manager (Sr. Consultant)	Infosys, delhi	9718423687	vivek.pilania@infosys.com	https://www.linkedin.com/in/vivekpilania-iimc/
2	Dronelab	Nikhil Methiya	Founder		9409415494	nikhil@dronelab.in	https://in.linkedin.com/in/nikhilmethiya
3	Mindshare (Inclusive Minds)	Pamindar Singh	Team Lead		8713901984	paminder.singh@themindshare.in	https://www.linkedin.com/in/paminder-singh-7990b8101/
4	Marut drones	Prem Kumar Vislawath	Founder		9985855494	prem@marutdrones.com	https://www.linkedin.com/in/premkumarvislawath
5	TCS	Sree Karthikeyan	Cybersecurity IAM Analyst		9626165768	sreekarthikeyan0898@gmail.com	
6	Wipro	Abdul Rahim	Senior Associate		7339471256	Abdul.rahims@wipro.com	https://in.linkedin.com/in/abdul-rahim-bb428b1a1

7	Amazon	Asvin Ragav R	Data Associate		9994308478	asvinragav16@gmail.com	
8	Drone Stark	Rohan Raut	CEO		7760908383	rohan@dronestark.com	https://www.linkedin.com/in/rohanraut92
9	IBM	Arpita Majumder	Tech Consultant	IBM DLF Park 1 New Town Kolkata West Bengal-700156	7894369677	Arpita.majumder@ibm.com	https://www.linkedin.com/in/arpita-majumder-85612a67/
10	Skywalk Drobotics Academy	Suresh Narayanan	President & Founder	-	8807527922	suresh@skywalkdrobotics.com	https://www.linkedin.com/in/suresh-narayanan/
11	Acolyte	Saranya varun	Research Analyst		9944313170	saranyakathir128@gmail.com	

Annexure: Training & Employment Details

Training & Employment Projections:

Year	Total Candidates		Women		People with Disability	
	Estimated Training #	Estimated Employed Opportunities	Estimated Training #	Estimated Employed Opportunities	Estimated Training #	Estimated Employed Opportunities
2023-24	-	-	-	-	-	-
2024-25	-	-	-	-	-	-
2025-26	-	-	-	-	-	-

#The Estimated Data is an average for each state.

Training, Assessment, Certification, and Placement Data for previous versions of qualifications:

Qualification Version	Year	Total Candidates			Women			People with disability		
		Trained	Assessed	Certified	Trained	Assessed	Certified	Trained	Assessed	Certified
		-	-	-	-	-	-	-	-	-

Content availability for the previous version of qualifications:

☐ Participant Handbook ☐ Facilitator Guide ☐ Digital Content ☐ Qualification Handbook ☐ Any Other:

Language in which content is available:

Annexure: Blended Learning

Blended Learning Estimated Ratio & Recommended Tools:

Refer NCVET "Guidelines for Blended Learning for Vocational Education, Training & Skilling" available on:

<https://ncvet.gov.in/sites/default/files/Guidelines%20for%20Blended%20Learning%20for%20Vocational%20Education,%20Training%20&%20Skilling.pdf>

S. No.	Select the Components of the Qualification	List Recommended Tools – for all Selected Components	Offline : Online Ratio
1	☐ Theory/ Lectures - Imparting theoretical and conceptual knowledge	NA	NA
2	☐ Imparting Soft Skills, Life Skills, and Employability Skills /Mentorship to Learners	NA	NA
3	☐ Showing Practical Demonstrations to the learners	NA	NA
4	☐ Imparting Practical Hands-on Skills/ Lab Work/ workshop/ shop floor training	NA	NA
5	☐ Tutorials/ Assignments/ Drill/ Practice	NA	NA
6	☐ Proctored Monitoring/ Assessment/ Evaluation/ Examinations	NA	NA
7	☐ On the Job Training (OJT)/ Project Work Internship/ Apprenticeship Training	NA	NA

Annexure: Detailed Assessment Criteria

Detailed Assessment criteria for each NOS/Module are as follows:

NOS/Module Name	Assessment Criteria for Performance Criteria/Learning Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
SSC/N8435: Design Software for the drone system	PC1. Collaborate with stakeholders to document functional (Flight control, Navigation, Payload integration, communication, Data logging ,mission planning etc.) and non-functional requirements (performance, scalability, security etc.)	3	6	-	2
	PC2. Create architectural diagrams that outline the software components and their interactions, define the overall structure of the software, including modules for flight control, data processing, and user interface.	3	6	-	2
	PC3. Design navigation algorithms (e.g., waypoints, obstacle avoidance, path planning).	5	9	-	4
	PC4. Develop flight control algorithms to manage stabilization, speed, and performance parameters.	5	9	-	4
	PC5. Write the source code for each component, focusing on flight control, navigation, and data processing, utilize relevant programming languages (e.g., C++, Python, ROS) based on project requirements.	7	10	-	4
	PC6. Ensure that the software is integrated with drone hardware components (e.g., sensors, GPS, motors).	7	10	-	4
	Total Marks	30	50	-	20
SSC/N8436: Conduct thorough testing of drone system software in both simulated environments and real-world scenarios to ensure reliability and safety.	PC1. Employ simulation tools to test algorithms and flight control without physical hardware.	2	4	-	1
	PC2. Validate the behavior and performance of the software using a controlled virtual environment.	2	4	-	1
	PC3. Conduct flight tests to evaluate the software's performance in real-world conditions.	4	5	-	1
	PC4. Monitor system behavior, assess navigation accuracy, and verify data processing efficiency during flights.	4	5	-	1
	PC5. Identify and resolve any issues or bugs found during testing.	5	8	-	4
	PC6. Optimize algorithms for better performance, reliability, and responsiveness.	2	6	-	3
	PC7. Document the code, including usage instructions, algorithm explanations, and system architecture.	2	6	-	3
	PC8. Update and refine the software based on user inputs, testing results, and technology advancements.	4	6	-	3
	PC9. Prepare the software for deployment on the drone's onboard systems.	5	6	-	3
	Total Marks	30	50	-	20
DGT/VSQ/ N0102 Employability Skills (60 Hrs)	PC1 Introduction to Employability Skills	1	1	-	-
	PC2 Constitutional values – Citizenship	1	1	-	-
	PC3 Becoming a Professional in the 21st Century	2	4	-	-
	PC4 Basic English Skills	2	3	-	-
	PC5 Career Testing & Goal Setting	1	2	-	-
	PC6 Communication Skills	2	2	-	-

NOS/Module Name	Assessment Criteria for Performance Criteria/Learning Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
	PC7 Diversity & Inclusion	1	2	-	-
	PC8 Financial and Legal Literacy	2	3	-	-
	PC9 Essential Digital Skills	3	4	-	-
	PC10 Entrepreneurship	2	3	-	-
	PC11 Customer Service	1	2	-	-
	PC12 Getting Ready for Apprenticeship & Jobs	2	3	-	-
	Total Marks	20	30	-	-
Grand Total Marks		80	130	-	40

Annexure: Assessment Strategy

Assessment Process Overview

Batch Creation & Assessment Request:

Training Providers (TP) or Training Centers (TC), including any other authorized partner of Ministry/ Department create batches / push batches on the SIDH portal. Assessment requests are submitted through the SIDH portal or via email or other media as authorized from time to time. For NON-SIDH schemes, assessment requests are received electronically or through respective State Skill Mission portals. TP/TC initiates the assessment request through the InSDMS portal and processes the payment (where applicable).

Batch Alignment & Confirmation:

Upon payment confirmation, batches are assigned to the Assessment Agency based on factors like:

- Assessment readiness
- Availability of certified assessors for the specific job role

- Assessment capping to an assessment agency as prescribed from time to time for an AB An email communication / prescribed mode communication is sent to TP/TC for confirmation of the assessment date, with IT-ITeS SSC in the loop. Once confirmation is received, the Assessment Agency designates a TOA-certified assessor to conduct or facilitate the assessment.
- Batches are only formed when the Qualification is active.

Candidate Verification & Assessment Execution:

Candidate details are verified and documented at the beginning of the assessment by a certified assessor. A Quality Assurance (QA) mechanism is enforced, requiring an undertaking from the TC. Regular feedback is collected from TP/TC to ensure continuous improvement.

Evidence Collection & Validation:

Proctors or assessors capture date/time-stamped and geo-tagged photographs of the assessment location during the process. Attendance is also ensured offline. A PC-wise result analysis is conducted to refine assessment standards.

Monitoring & Compliance:

Batch monitoring follows established protocols, ensuring adherence to assessment guidelines. Sample based surprise visits are conducted at TC locations during both training and assessments to verify compliance. This structured approach ensures transparency, quality control, and validation throughout the assessment process.

Testing Environment:

- Check the Assessment location, date and time
- 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.

Assessment Quality Assurance levels/Framework:

IT-ITeS SSC nasscom is responsible for the development and periodic review of the question bank developed for a specific job role. We publish an openly accessible sample /model question paper on our website for all stakeholders. The quality of the Question Bank created by the assessment designer is validated by a Subject matter experts on the following parameters:

- Appropriateness of the Question Bank in terms of facts, data and information.
- Checks for grammar, spellings, scripting and formatting.
- The information provided should be specific enough to remove any ambiguity in answers/solutions to the question.

- Relevance – Assessing the topic well w.r.t. the job role.
- Check if the difficulty level of each question is as per the matrix.
- Check if the images used in the question are clear and relevant.
- All variables, symbols and abbreviations used must be declared.
- The correct answer option should be unique, and the options should not be overlapping

Annexure: Acronym and Glossary

Acronym

Acronym	Description
AA	Assessment Agency
AB	Awarding Body
NCrF	National Credit Framework
NOS	National Occupational Standard(s)
NQR	National Qualification Register
NSQF	National Skills Qualifications Framework
OJT	On Job Training

Glossary

Term	Description
National Occupational Standards (NOS)	NOS define the measurable performance outcomes required from an individual engaged in a particular task. They list down what an individual performing that task should know and also do.
Qualification	A formal outcome of an assessment and validation process is obtained when a competent body determines that an individual has achieved learning outcomes to given standards.
Qualification File	A Qualification File is a template designed to capture necessary information about a Qualification from the perspective of NSQF compliance. The Qualification File will be normally submitted by the awarding body for the qualification.
Sector	A grouping of professional activities based on their main economic function, product, service, or technology.