QUALIFICATION FILE

CNC Milling

☒ Short Term Training (STT) ☐ Long Term Training (LTT) ☐ Apprenticeship

☐ Upskilling ☐ Dual/Flexi Qualification ☐ For ToT ☐ For ToA

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

NCrF/NSQF Level: 4.5

Submitted By:

Capital Goods and Strategic Skill Council

39,1st Floor, Samyak Tower, Pusa Rd, Block 9A, WEA, Karol Bagh, New Delhi, Delhi, 110005

Table of Contents

Section 1: Basic Details

.	**Qualification Name**	CNC Milling	
.	**Sector/s**	Capital goods and Strategic Manufacturing	
.	**Type of Qualification: ☒ New ☐ Revised ☐ Has Electives/Options ☐OEM**	**NQR Code & version of existing/previous qualification:** *(change to previous, once approved)*	**Qualification Name of existing/previous version:**
.	**a. OEM Name** **b. Qualification Name** (*Wherever applicable)*		
.	**National Qualification Register (NQR) Code &Version** (*Will be issued after NSQC approval)*	QG-4.5-CG-01810-2024-V1-CGSC	**. NCrF/NSQF Level: 4.5**
.	**Award (Certificate/Diploma/Advance Diploma/ Any Other** *(Wherever applicable specify multiple entry/exits also & provide details in annexure)*	Certificate	
.	**Brief Description of the Qualification**	A CNC Milling Machinist is responsible for the operation and programming of computer numerical control (CNC) milling machines to produce precision components according to engineering specifications. This role involves setting up machines, selecting appropriate tools, and programming CNC software to create toolpaths for efficient material removal. CNC Milling Machinists monitor machine operations, make adjustments as necessary, and conduct regular inspections using precision measuring instruments to ensure the quality of machined parts. Troubleshooting, problem solving, and adherence to safety protocols are essential aspects of the job. Additionally, CNC Milling Machinists may be involved in routine machine maintenance, documentation of machining processes, and collaboration with other team members to optimize workflows and meet production goals. Continuous improvement and staying current with advancements in CNC technology are also key aspects of the role.	
.	**Eligibility Criteria for Entry for Student/Trainee/Learner/Employee**	**a. Entry Qualification & Relevant Experience:**	

S. No.	Academic/Skill Qualification (with Specialization - if applicable)	Required Experience (with Specialization - if applicable)
1.	Completed 1st year of UG	
2.	Pursuing 1st year of UG and continuous education	
3.	Pursuing 3rd year of 3-year diploma after 10th and continuous education	

		b. Age: 21

4.	Pursuing 2 nd year of 2- year diploma after 12 and continuous education	
5	10th Grade pass with 1 year NTC plus 1 year NAC plus 1 year CITS	
6	10th grade pass with 1 year NTC plus CITS	1 year Experience required
7	8th Grade pass with 2 year NTC plus 1 year NAC plus 1 year CITS	1 year Experience required
8	Previous relevant Qualification of NSQF Level 3.5 and with minimum education as 8th Grade pass	3 year relevant experience
9	Previous relevant Qualification of NSQF Level 4 and with minimum education as 8th Grade pass	1.5 year relevant experience

0.	**Credits Assigned to this Qualification, Subject to Assessment** *(as per National Credit Framework (NCrF))*	16	**1. Common Cost Norm Category (I/II/III)** *(wherever applicable)*: **I**
2.	**Any Licensing requirements for Undertaking Training on This Qualification** *(wherever applicable)*	NA	
3.	**Training Duration by Modes of Training Delivery** *(Specify **Total Duration** as per selected training delivery modes and as per requirement of the qualification)*	☒**Offline** ☐**Online** ☐**Blended**	

Training Delivery Modes	Theory (Hours)	Practical (Hours)	OJT Mandatory (Hours)	OJT Recommended (Hours)	Total (Hours)
Classroom (offline)	150	270	90		510
Online					

(Refer Blended Learning Annexure for details)

4.	**Aligned to NCO/ISCO Code/s** *(if no code is available mention the same)*	NCO-2015/7223.6003; 2015/7223.5003
5.	**Progression path after attaining the qualification** *(Please show Professional and Academic progression)*	CNC Programmer, Manufacturing Engineer, CAD/CAM Engineer

6.	**Other Indian languages in which the Qualification & Model Curriculum are being submitted**	**No**	
7.	**Is similar Qualification(s) available on NQR-if yes, justification for this qualification**	**☐ Yes ☒ No URLs of similar Qualifications:**	
8.	**Is the Job Role Amenable to Persons with Disability**	**☐ Yes ☒ No** **If "Yes", specify applicable type of Disability:**	
9.	**How Participation of Women will be Encouraged**	**The qualification pack empowers women to participate and thereby creating employment and research openings in different sectors**	
0.	**Are Greening/ Environment Sustainability Aspects Covered** *(Specify the NOS/Module which covers it)*	**☐ Yes ☒ No**	
1.	**Is Qualification Suitable to be Offered in Schools/Colleges**	**Schools ☒ Yes ☐ No Colleges ☒ Yes ☐ No** **School: Atal Tinkering labs** **College: Atal Incubation, MSME incubation and state incubators**	
2.	**Name and Contact Details of Submitting / Awarding Body SPOC** *(In case of CS or MS, provide details of both Lead AB & Supporting ABs)*	**Name: Ms. Shalini Singh** **Email: ceo@cgssc.org** **Contact No.: 9654310244** **Website: www.cgsc.in**	
3.	**Final Approval Date by NSQC:** *06/02/2024*	**4. Validity Duration: 2 years**	**5. Next Review Date: 06/02/2026**

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.	Work organization and management(milling)	CSC/N0460 V1.0	Non-Core	4.5	2	20	40	-	-	60	20	30			50	12
2.	Interpret engineering drawings and follow the specification	CSC/N0441 V1.0	Core	4.5	2	10	20			30	10	40			50	13
3.	Process planning	CSC/N0442 V1.0	Core	4.5	3	30	60	-	-	90	10	40			50	13
4.	Programming	CSC/N0443 V1.0	Core	4.5	3	40	50	-	-	90	10	40			50	12
5.	Metrology	CSC/N0444 V1.0	Core	4.5	3	20	40	-	-	60	10	40			50	12
6.	Operating	CSC/N0445 V1.0	Core	4.5	1	20	40	-	-	60	10	40			50	13
7.	Machining	CSC/N0446 V1.0	Core	4.5	2	10	20			30	30	70			100	25
Duration (in Hours) / Total Marks					16	150	270	90		510	100	300			400	100

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: 70 % *(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)*	B. Tech in Electrical/ Mechatronics/ Industrial/ Information Technology with 7 years of relevant experience.
2.	**Master Trainer's Qualification and experience in the relevant sector (in years)** *(as per NCVET guidelines)*	B. Tech in Electrical/ Mechatronics/ Industrial/ Information Technology with 10 years of relevant experience.
3.	**Tools and Equipment Required for Training**	☒Yes ☐No (*If "Yes", details to be provided in Annexure)*
4.	**In Case of Revised Qualification, Details of Any Upskilling Required for Trainer**	

Section 4: Assessment Related

1.	**Assessor's Qualification and experience in relevant sector (in years)** *(as per NCVET guidelines)*	B. Tech in Electrical/ Mechatronics/ Industrial/ Information Technology with 7 years of relevant experience.
2.	**Proctor's Qualification and experience in relevant sector (in years)** *(as per NCVET guidelines)*	B. Tech in Electrical/ Mechatronics/ Industrial/ Information Technology with 7 years of relevant experience.
3.	**Lead Assessor's/Proctor's Qualification and experience in relevant sector (in years)** *(as per NCVET guidelines)*	B. Tech in Electrical/ Mechatronics/ Industrial/ Information Technology with 10 years of relevant experience.
4.	**Assessment Mode** *(Specify the assessment mode)*	Offline
5.	**Tools and Equipment Required for Assessment**	☒ Same as for training ☐ Yes ☐ No *(details to be provided in Annexure-if it is different for Assessment)*

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):** Yes
2.	**Latest Market Research Reports or any other source (not older than 2 years) (Yes/No):** Yes
3.	**Government /Industry initiatives/ requirement (Yes/No):** Yes
4.	**Number of Industry validation provided:**
5.	**Estimated nos. of persons to be trained and employed:**
6.	**Evidence of Concurrence/Consultation with Line Ministry/State Departments:** *In Progress* 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 level/NSQF descriptors *(Mandatory)*	*Annexure: Evidence of Level*
2.	**Annexure:** List of tools and equipment relevant for qualification *(Mandatory, except in case of online course)*	*Annexure: Tools and Equipment (Lab Set-Up)*
3.	**Annexure:** Detailed Assessment Criteria *(Mandatory)*	*Annexure: Detailed Assessment Criteria*
4.	**Annexure:** Assessment Strategy *(Mandatory)*	*Annexure: Assessment Strategy*
5.	**Annexure:** Blended Learning *(Mandatory, in case selected Mode of delivery is "Blended Learning")*	
6.	**Annexure:** Multiple Entry-Exit Details *(Mandatory, in case qualification has multiple Entry-Exit)*	
7.	**Annexure:** Acronym and Glossary *(Optional)*	*Annexure: Acronym and Glossary*
8.	**Supporting Document:** Model Curriculum *(Mandatory – Public view)*	*MC_CG IIoT Data Analytics Engineer*
9.	**Supporting Document:** Career Progression *(Mandatory - Public view)*	*Summary sheet*
10.	**Supporting Document:** Occupational Map *(Mandatory)*	*Occupational Mapping*
11.	**Supporting Document:** Assessment SOP *(Mandatory)*	*Attached in MC_CG IIoT Data Analytics Engineer*
12.	**Any other document you wish to submit:**	

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
Professional Theoretical Knowledge/Process	• Interpreting engineering drawings and following the specifications • Generating the processes and programs with the CAD/CAM system and/or G and M-codes • Setting up the tools, work holding devices, and work pieces on the CNC milling centre • Manipulating cutting conditions, based on the properties of the material and tools • Operating, inspecting, and maintaining the accuracy of dimensions within the specified tolerances • Optimizing the process, taking into account the production type: whether large quantities of one part, small batches, or one-of-a-kind items.	As can be inferred from the learning outcomes and performance criteria of the Qualification listed in the adjacent cell, the CNC Milling machinist requires well developed skill, with clear choice of procedures in familiar context. Hence NSQF level for this descriptor is 4.5.	4.5
Professional and Technical Skills/ Expertise/ Professional Knowledge	• Proficiency in G-code programming, which is the language used to control CNC machines. • Knowledge of CAM (Computer-Aided	As can be inferred from the knowledge and understanding related points mentioned in the adjacent cell, which have been taken from the the CNC Milling machinist qualification pack, job role holder must have a knowledge	4.5

	Manufacturing) software to generate toolpaths and convert design models into CNC code. • Ability to troubleshoot and optimize CNC programs for efficiency and accuracy. • Understanding of machining principles and processes. • Knowledge of different cutting tools, materials, and their properties. • Familiarity with various machining strategies, such as contouring, pocketing, and drilling. • Ability to interpret and understand engineering drawings and blueprints. • Proficiency in geometric dimensioning and tolerancing (GD&T) to ensure precision in machining. • Understanding of the properties and behavior of different materials, including metals, plastics, and composites. • Knowledge of how material characteristics affect machining processes. • Skills in setting up and configuring CNC milling machines.	of facts, principles, processes and general concepts, in a field of work or study Hence NSQF level for this descriptor is 4.5.	

	• Ability to load and unload workpieces, install cutting tools, and establish work offsets. • Knowledge of machine tool maintenance and troubleshooting. • Strong mathematical skills for calculations related to toolpaths, speeds, feeds, and dimensions. • Analytical skills to identify and solve machining problems and optimize processes. • Understanding of quality control processes to ensure the produced parts meet specifications. • Knowledge of inspection tools and techniques, including micrometers, calipers, and coordinate measuring machines (CMM). • Adherence to safety protocols and guidelines when working with CNC machines. • Knowledge of potential hazards and how to mitigate them. • Effective communication with team members, engineers, and supervisors.		

	• Ability to convey information about machining processes and potential issues. • Willingness to adapt to new technologies and machining methods. • Commitment to staying updated on industry trends, advancements, and new CNC technologies. • Ability to troubleshoot and resolve issues related to tool wear, machine malfunctions, or programming errors.		
Employment Readiness & Entrepreneurship Skills & Mind-set/Professional Skill	**Technical Skills:** • Proficiency in operating CNC milling machines. • Knowledge of machine controls and programming. • Ability to interpret engineering drawings and specifications. • Understanding geometric dimensions and tolerances (GD&T). • Skill in CNC programming using languages such as G-code and M-code. • Familiarity with CAM (Computer-Aided Manufacturing) software.	As can be inferred from the knowledge and understanding related points mentioned in the adjacent cell, which have been taken from the the CNC Milling machinist qualification pack, job role holder must have a knowledge of facts, principles, processes, and general concepts, in a field of work or study Hence NSQF level for this descriptor is 4.5.	4.5

	• Understanding different materials and their machining characteristics. • Ability to select appropriate cutting tools and machining parameters. • Proficient use of precision measuring instruments (calipers, micrometers, etc.). • Ensuring precision and accuracy in machining processes. • Knowledge of various cutting tools and their applications. • Skill in tool selection, setup, and maintenance. • Ability to diagnose and troubleshoot issues with CNC machines. • Problem-solving skills to address unexpected challenges. **Mindset and Professional Skills:** • Precision is crucial in CNC milling; attention to detail is paramount. • Ability to adapt to different materials, machine setups, and job requirements.		

	• Commitment to following safety protocols and guidelines. • A mindset for ongoing learning to keep up with technological advancements. • Willingness to attend workshops or training programs. • Efficiently manage time to meet production schedules and deadlines. • Collaboration with colleagues, including engineers and other machinists. • Effective communication within the team. • Ability to analyze problems and find effective solutions. • Critical thinking skills for optimizing machining processes. • Understanding the business side of manufacturing. • Identifying opportunities for process improvement and efficiency. • Commitment to producing high-quality products. • Adhering to quality control processes and standards.		

	• Ability to communicate effectively with team members and supervisors. • Conveying technical information to non-technical stakeholders.		
Broad Learning Outcomes/Core Skill	• Communication Skills • Decision Making • Planning • Mathematical Skills • Digital skills	As can be inferred from the knowledge and understanding related points mentioned in the adjacent cell, which have been taken from the the CNC Milling machinist qualification pack, job role holder must have a knowledge of facts, principles, processes, and general concepts, in a field of work or study. Hence NSQF level for this descriptor is 4.5	4.5
Responsibility	**Programming:** • Create CNC Programs • Verify Programs **Machine Setup:** • Workpiece Fixturing • Tool Setup **Operational Responsibilities:** • Machine Operation • Quality Control **Safety:** • Adhere to Safety Protocols: **Machine Maintenance:** • Troubleshooting **Identify Issues:** • Problem Resolution • Documentation **Record Keeping:** • Documentation of Issues	As can be inferred from the knowledge and understanding related points mentioned in the adjacent cell, the IIoT Data Analytics Engineer must take responsibility for own work and learning and some responsibility for others' works and learning. Hence NSQF level for this descriptor is 4.5	4.5

	• Communication **Collaboration:** • Continuous Improvement **Process Optimization:** • Training		

Annexure: Tools and Equipment (Lab Set-Up)

List of Tools and Equipment

Batch Size: 30

S. No.	Tool / Equipment Name	Specification	Quantity for specified Batch size
1.	CNC Milling machine		3
2.	CNC milling tools		10
3.	Cutting Tools		1 each
4.	Tool Holders		1 each
5.	Tool catalogues		10
6.	Measuring instruments		1 each
7.	Vice or clamp set for job holding		3
8.	Tool Presetter		1 each

Classroom Aids

The aids required to conduct sessions in the classroom are:

1. Laptop
2. Projector
3. Cloud access
4. Learning management system

Annexure: Industry Validations Summary

Provide the summary information of all the industry validations in table. This is not required for OEM qualifications.

S. No	Organization Name	Representative Name	Designation	Contact Address	Contact Phone No	E-mail ID	LinkedIn Profile *(if available)*

Annexure: Training & Employment Details

Training and Employment Projections:

Year	Total Candidates		Women		People with Disability	
	Estimated Training #	Estimated Employment Opportunities	Estimated Training #	Estimated Employment Opportunities	Estimated Training #	Estimated Employment Opportunities

Data to be provided year-wise for next 3 years

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

Qualification Version	Year	Total Candidates				Women				People with Disability			
		Trained	Assessed	Certified	Placed	Trained	Assessed	Certified	Placed	Trained	Assessed	Certified	Placed

Applicable for revised qualifications only, data to be provided year-wise for past 3 years.

List Schemes in which the previous version of Qualification was implemented:

1.
2.

Content availability for previous versions of qualifications:

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

Languages 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	Laptop, Projector, Projecting Screen and LMS.	1:1
2	☐Imparting Soft Skills, Life Skills, and Employability Skills /Mentorship to Learners	Laptop, Projector, Projecting Screen and LMS.	1:1
3	☐Showing Practical Demonstrations to the learners	As per tool list attached	NA
4	☐Imparting Practical Hands-on Skills/ Lab Work/ workshop/ shop floor training	As per tool list attached	NA
5	☐Tutorials/ Assignments/ Drill/ Practice	As per tool list attached	NA
6	☐Proctored Monitoring/ Assessment/ Evaluation/ Examinations	As per tool list attached	NA
7	☐On the Job Training (OJT)/ Project Work Internship/ Apprenticeship Training	As per tool list attached	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
Work organization and management CSC/N0460 V1.0	**PC1.** Use computer related professional software	3	5	-	-
	PC2. Interpret and apply quality standards and regulations	3	5	-	-
	PC3. Promote and apply health and safety regulations and best practice	3	5	-	-
	PC4. Use IT and related professional software	3	5		

				-	-
	PC5. Apply mathematical and geometrical principles accurately for the preparation and programming processes for CNC milling	4	5	-	-
	PC6. Develop creative solutions to complex design or technology challenges	4	5	-	-
	Total Marks	**20**	**30**		
Interpret engineering drawings and follow the specification CSC/N0441 V1.0	**PC1.** Interpret and apply engineering drawings and follow specifications	3	10	-	-
	PC2. Locate and identify main dimensions and secondary dimensions	2	10	-	-
	PC3. Locate and identify ISO standards for surface finishes Locate and identify ISO standards for geometrical form and positional tolerances	2	10	-	-
	PC4. Locate and identify ISO standards for geometrical form and positional tolerances	3	10	-	-
	Total Marks	**10**	**40**		
Process planning CSC/N0442 V1.0				-	-
	PC1. Identify and set the different machining features	3	10	-	-
	PC2. Identify the most efficient work holding solution to clamp the base material into the machine	2	10	-	-
	PC3. Select the right cutting tools for machining	2	10	-	-
	PC4. Define the cutting parameters as a function of the operation sequence, material type, and type of operation	3	10	-	-
	Total Marks	**10**	**40**		
Programming CSC/N0443 V1.0	**PC1.** Select the best methods according to the production type and part specification	3	10	-	-
	PC2. Use skill specific software and related hardware	2	10	-	-
	PC3. Generate programs by using the CAD/CAM system with the format of the initial data	2	10	-	-
	PC4. Start with drawings in paper format to create the geometry in wireframe and/or surface and/or solid	3	10	-	-
	Total Marks	**10**	**40**		
Metrology	**PC1.** Select and use appropriate measuring tools and instruments	**5**	20		

CSC/N0444 V1.0	**PC2.** Make measurements on threaded elements	**5**	20		
		10	**40**		
Operating CSC/N0445 V1.0	**PC1.** Prepare measurements and cutting tools	**5**	20		
	PC2. Identify and design the functional parameters for operation on the CNC milling machine	**5**	20		
		10	**40**		
Machining CSC/N0446 V1.0	**PC1.** Identify and designate the different machining processes on a CNC milling machine	**2**	**4**		
	PC2. Optimize the machining strategy	**1**	**3**		
	PC3. Define and adjust the cutting parameters as a function of the operation sequence, material type, type of operation, and CNC machine tool	**2**	**4**		
	PC4. Start the cutting process from the raw material	**2**	**4**		
	PC5. Solid block	**1**	**3**		
	PC6. Perform the following machining operations: Facing Roughing and finishing	**2**	**4**		
	PC7. External contours	**1**	**2**		
	PC8. Island milling	**2**	**4**		
	PC9. Milling channels	**1**	**3**		
	PC10. Pocket (figurative) • Pocket (circular and rectangular) • Taper ribs • Thread milling • Internal • External • Canned cycles • Through hole boring • Blind hole boring • Reaming • Tapping • Drilling • 3D machining operations • Roughing • Finishing	**3**	**7**		
	PC11. Tapping	**3**	**7**		
	PC12. Drilling	**1**	**4**		
	PC13. 3D machining operations	**3**	**7**		
	PC14. Roughing	**3**	**7**		

	PC15. Finishing	**3**	**7**		
		30	**70**		
Grand Total					

Annexure: Assessment Strategy

This section includes the processes involved in identifying, gathering, and interpreting information to evaluate the Candidate on the required competencies of the program.

Mention the detailed assessment strategy in the provided template.

<1. Assessment System Overview:

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

2. Testing Environment:

- 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.

3. Assessment Quality Assurance levels/Framework:

- Question bank is created by the Subject Matter Experts (SME) are verified by the other SME
- Questions are mapped to the specified assessment criteria
- Assessor must be ToA certified & trainer must be ToT Certified

4. Types of evidence or evidence-gathering protocol:

- Time-stamped & geotagged reporting of the assessor from assessment location
- Centre photographs with signboards and scheme specific branding

5. Method of verification or validation:

- Surprise visit to the assessment location

6. Method for assessment documentation, archiving, and access

- Hard copies of the documents are stored

On the Job:

1. Each module (which covers the job profile of Automotive Service Assistant Technician) will be assessed separately.
2. The candidate must score 60% in each module to successfully complete the OJT.
3. Tools of Assessment that will be used for assessing whether the candidate is having desired skills and etiquette of dealing with customers, understanding needs & requirements, assessing the customer and perform Soft Skills effectively:
   • Videos of Trainees during OJT
4. Assessment of each Module will ensure that the candidate is able to:

- Effective engagement with the customers
- Understand the working of various tools and equipment

Annexure: Acronym and Glossary

Acronym

Acronym	Description
AA	Assessment Agency
AB	Awarding Body
ISCO	International Standard Classification of Occupations
NCO	National Classification of Occupations
NCrF	National Credit Framework
NOS	National Occupational Standard(s)
NQR	National Qualification Register
NSQF	National Skills Qualifications Framework
OJT	On the 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 which 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 of 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 on the basis of their main economic function, product, service or technology.
Long Term Training	Long-term skilling means any vocational training program undertaken for a year and above. https://ncvet.gov.in/sites/default/files/NCVET.pdf