

QUALIFICATION FILE

AI Solution developer

- ☒ 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: 6

Submitted By:

IT-ITeS Sector Skills Council NASSCOM (SSC NASSCOM)

Plot No. – 7, 8, 9 & 10

Sector – 126, Noida, Uttar Pradesh - 201303

Table of Contents

Section 1: Basic Details	3
Section 2: Module Summary	6
NOS/s of Qualifications.....	6
Mandatory NOS/s:	6
Elective NOS/s:	7
Optional NOS/s:	7
Assessment - Minimum Qualifying Percentage.....	7
Section 3: Training Related.....	7
Section 4: Assessment Related.....	8
Section 5: Evidence of the Need for the Qualification	9
Section 6: Annexure & Supporting Documents Check List.....	9
Annexure: Evidence of Level	10
Annexure: Tools and Equipment (lab set-up).....	13
Annexure: Industry Validations Summary	13
Annexure: Training & Employment Details	15
Annexure: Blended Learning	16
Annexure: Detailed Assessment Criteria	17
Annexure: Assessment Strategy	19
Annexure: Acronym and Glossary	21

Section 1: Basic Details

1.	Qualification Name	AI Solution Developer	
2.	Sector/s	IT/ITeS	
3.	Type of Qualification: ☐ New ☒ Revised ☐ Has Electives/Options ☐ OEM	NQR Code & version of the existing /previous qualification: QG-07-IT-01529-2023-V1.1-NASSCOM & Version 3	Qualification Name of the existing/previous version: AI Solution Developer
4.	a. OEM Name b. Qualification Name (Wherever applicable)		
5.	National Qualification Register (NQR) Code &Version (Will be issued after NSQC approval)	QG-06-IT-045852025-V2-NASSCOM & Version 4	6. NCrF/NSQF Level: 6
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 AI Solution Developer qualification is designed to equip individuals with the necessary skills and knowledge to design, implement, maintain, and validate AI-based solutions in various organizational contexts. The core competencies include understanding business requirements, evaluating platforms and technologies, implementing data governance, and ensuring compliance with ethical standards in AI. Candidates will learn to apply enterprise architecture principles, effectively manage data, and utilize various tools and methodologies to support the design and deployment of AI solutions. In addition, the qualification emphasizes the importance of monitoring and evaluating solution performance, ensuring ongoing compliance, and adapting to evolving industry standards. It also encompasses modules on employability skills, professional development, communication, and customer service, thereby preparing candidates for success in the workplace.	
9.	Eligibility Criteria for Entry for a Student/Trainee/Learner/Employee	a. Entry Qualification & Relevant Experience/ field: *Relevant Experience in job roles related to IT/AI/Big Data Analytics/Programming The relevant experience would include work, internship, and apprenticeship after completing relevant educational qualifications.	

		** PHD or PG or UG or diploma with courses related to Engg./ Science <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>Completed 4 Year UG degree**</td><td>-</td></tr> <tr> <td>2</td><td>Completed 3 Year UG Degree**</td><td>1.5 years of relevant experience*</td></tr> <tr> <td>3</td><td>Previous Relevant qualification of NSQF level 5.5</td><td>1.5 years of relevant experience*</td></tr> </table> b. Age: NA						S. No.	Academic/Skill Qualification (with Specialization - if applicable)	Required Experience (with Specialization - if applicable)	1	Completed 4 Year UG degree**	-	2	Completed 3 Year UG Degree**	1.5 years of relevant experience*	3	Previous Relevant qualification of NSQF level 5.5	1.5 years of relevant experience*				
S. No.	Academic/Skill Qualification (with Specialization - if applicable)	Required Experience (with Specialization - if applicable)																					
1	Completed 4 Year UG degree**	-																					
2	Completed 3 Year UG Degree**	1.5 years of relevant experience*																					
3	Previous Relevant qualification of NSQF level 5.5	1.5 years of relevant experience*																					
10.	Credits Assigned to this Qualification, Subject to Assessment (as per National Credit Framework (NCrF))	19 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"> <thead> <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> </thead> <tbody> <tr> <td>Classroom (offline)</td><td>204</td><td>246</td><td>120</td><td>-</td><td rowspan="2">570</td></tr> <tr> <td>Online</td><td>204</td><td>246</td><td>120</td><td>-</td></tr> </tbody> </table> (Refer Blended Learning Annexure for details)					Training Delivery Mode	Theory (Hours)	Practical (Hours)	OJT (Mandatory) Hours	OJT (Recommended) Hours	Total (Hours)	Classroom (offline)	204	246	120	-	570	Online	204	246	120	-
Training Delivery Mode	Theory (Hours)	Practical (Hours)	OJT (Mandatory) Hours	OJT (Recommended) Hours	Total (Hours)																		
Classroom (offline)	204	246	120	-	570																		
Online	204	246	120	-																			
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: •Academic Progression: Access to other qualifications at the same NSQF level – Data Architect, Product Manager •Professional Progression: Access to related qualification(s) at the next NSQF level – Enterprise architect																					

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 participation of women will be encouraged?	The Program is gender neutral although to increase the women participation, organizations are keeping aside few seats to encourage the female candidates	
20.	Are Greening/Environment Sustainability Aspects covered (Specify the NOS/Module which Covers it)	☒ Yes ☐ No, DGT/VSQ/N0102: Employability Skills (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 Kapoor Email: Standards@nasscom.in Contact No.: 0120-4990111 Website: https://www.sscnasscom.com/	
23.	Final Approval Date by NSQC: 07 th October 2025	24. Validity Duration: 3 Years	25. Next Review Date: 07 th October 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 training **Man.**-Mandatory Training **Rec.**-Recommended **Proj.**- Project

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.	Pr oj.	Vi va	Total	Weightage (%) (if applicable)
1.	Design new solution architectures as per specifications.	SSC/N8113, V3.0	Core	6	05	45:00	75:00	30:00	00:00	150:00	30	50	-	20	100	21
2.	Maintain existing architectures for solutions.	SSC/N8114 V3.0	Core	6	04	30:00	60:00	30:00	00:00	120:00	30	50	-	20	100	21
3.	Ensure compliance and ethical standards	SSC/N8159, V1.0	Core	6	04	51:00	39:00	30:00	00:00	120:00	30	50	-	20	100	21
4.	Monitor and Evaluate AI-Solution Performance	SSC/N8160, V1.0	Core	6	04	54:00	36:00	30:00	00:00	120:00	30	50	-	20	100	21
5.	Employability Skill (60 Hrs)	DGT/VSQ/N01 02 V1.0	Non-Core	4	02	24:00	36:00	00:00	00:00	60:00	20	30	-	-	50	16
Duration (in Hours) / Total Marks					19	204:00	246:00	120:00	00:00	570:00	140	230	-	80	450	100

Elective 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																

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

Assessment - Minimum Qualifying Percentage

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.)

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 AIBDA. The industry experience would include work, internship, and apprenticeship 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 AIBDA. The full-time experience would include work, internship, and apprenticeship 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 AIBDA. 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 AIBDA. 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 AIBDA. 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 shall be conducted through an online proctored format, incorporating scenario-based multiple-choice questions designed to effectively evaluate practical understanding and real-world application of concepts. Additionally, it will include a viva-voce and hands-on practical evaluation to comprehensively assess the individual's proficiency in specific learning outcomes.
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): Industry Initiative
4.	Number of industry validations provided: 21
5.	Estimated number of people to be trained and employed: 1000
6.	Evidence of Concurrence/Consultation with Line/State Departments: Applied 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>	Acronym and Glossary
8.	Supporting Document: Model Curriculum <i>(Mandatory-Public View)</i>	MC_SSCQ8108_AI- Solution Developer_V4
9.	Supporting Document: Career Progression <i>(Mandatory-Public View)</i>	AI BDA Occupational Map
10.	Supporting Document: Occupational Map <i>(Mandatory)</i>	AI BDA Occupational Map
11.	Supporting Document: Assessment SOP <i>(Mandatory)</i>	NA
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
Professional Theoretical Knowledge: Advanced knowledge with critical understanding of emerging developments	Requirement: AI Solution Architects must possess deep theoretical understanding of concepts such as machine learning algorithms,	The NSQF Level descriptor indicates that candidates should possess advanced knowledge with a critical understanding of emerging	6

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
	natural language processing, data mining, and neural networks. They should also be familiar with emerging technologies like edge computing, quantum computing, and advancements in AI ethics. Outcome: This theoretical knowledge enables them to design robust AI architectures that leverage the best available methods for data processing and solution delivery.	developments. The role requires ongoing education and familiarity with the latest advancements in AI to inform architectural decisions, reflecting the expectation for continuous learning at this level.	
Professional and Technical Skills/ Expertise: Specialized skills , transdisciplinary skills, leadership skills	Requirement: The role demands specialized skills in software development, system integration, and data management. Proficiency in using various AI development frameworks (e.g., TensorFlow, PyTorch), cloud platforms (AWS, Azure, Google Cloud), and programming languages (Python, R) is essential. Additionally, familiarity with Agile methodology and DevOps practices is crucial. Outcome: These technical skills facilitate the effective implementation of AI solutions that are scalable, efficient, and aligned with business requirements. Leadership skills promote effective team collaboration and project management.	The requirement for specialized and transdisciplinary skills ties directly to the descriptor that emphasizes the need for a diverse skill set, including technological adaptability and leadership capabilities. This reflects the expectation of candidates to not only have technical skills but also the ability to lead and collaborate across disciplines.	
Employment Readiness & Entrepreneurship Skills & Mind-set: Cross cultural competency , transformational leadership	Requirement: Candidates should demonstrate an entrepreneurial mindset, adept at recognizing opportunities for innovation and efficiency. This includes being able to navigate complex project	The descriptor highlights the importance of cross-cultural competency and transformational leadership. The AI Solution Architect must navigate diverse work environments and foster innovation,	

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
	environments and adapt to changing technologies and market dynamics. Outcome: Employment readiness is enhanced through the ability to apply soft skills such as communication, negotiation, and critical thinking, enabling candidates to add value in diverse organizational settings.	aligning with the expectation that graduates will thrive in varied professional settings.	
Broad Learning Outcomes: Apply acquired advanced technical skills, technical appraisal and reviews	Requirement: AI Solution Architects are expected to analyze and assess the implications of various technical and business requirements on their solutions. This includes performing thorough technical appraisals and conducting performance evaluations to ensure that architectures meet intended goals. Outcome: Mastery of these learning outcomes enables architects to optimize solutions continually and respond effectively to stakeholder feedback.	The ability to apply advanced technical skills for comprehensive appraisals and reviews is a direct reflection of the descriptor focusing on broad learning outcomes. The role requires individuals who can leverage their skills to effect positive changes and enhancements in architectural designs, demonstrating practical application of knowledge.	
Responsibility: Mid-level leadership (like Sr. Supervisor, Tower Leader, Sr. Technical Manager, etc.)	Requirement: The role typically involves mid-level leadership responsibilities, such as overseeing project teams, mentoring junior staff, and making strategic decisions that impact the organization's direction regarding AI initiatives. Outcome: This aligns with being accountable for meeting project deadlines, budgets, and quality standards while ensuring team dynamics foster innovation and productivity.	The NSQF Level descriptor indicates a level of responsibility consistent with mid-level positions where candidates are expected to lead. AI Solution Architects are entrusted with overseeing strategic projects, showcasing their readiness for greater leadership roles and impact within organizations.	6

Annexure: Tools and Equipment (lab set-up)

List of Tools and Equipment

Batch Size:

S. No.	Tool / Equipment Name	Specification	Quantity for specified Batch size
1	PC/Laptop with internet	-	
2	Learning Management Systems (LMS)	Moodle,Canvas (free Version)	
3	Document Creation and Collaboration	Libreoffice, Google Docs	
4	Data Visualization and Architecture	Draw.io (diagrams.net),Grafana, Prometheus	
5	Data Management and Analysis Tools	Apache NiFi, Python, R	
6	Project Management Tools	Trello (Free Tier),OpenProject, Jira (Free Version)	
7	Survey and Feedback Tools	LimeSurvey, Google Forms	
8	Version Control and Collaboration	Git,Github	
9	Video Conferencing and Collaboration	Jitsi meet,Zoom	
10	Continuous Integration/Continuous Delivery (CI/CD) Tools	Jenkins	
11	Compliance and Risk Management Frameworks	Risk Register Template (Open Source) , OpenAI Ethics Guidelines	
12	Data Quality Management Tools	Apache Airflow	
13	Analytics Tools	Google analytics, Tableau Public	

***Tools are open source**

Classroom Aids

The aids required to conduct sessions in the classroom are:

1. White Board
2. White Board Marker
3. Projector

Annexure: Industry Validations Summary

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

S. No	Organisation Name	Representative Name	Designation	Contact Address	Contact Phone No	E-mail ID	LinkedIn Profile
1	Infosys	Vivek Pilaniya	Program Manager	Infosys, delhi	9718423 687	vivek.pilania@infosys.com	https://www.linkedin.com/in/vivek-pilania-iimc
2	IBM	Arpita Majumder	Tech Consultant	IBM DLF Park 1	7894369 677	Arpita.majumder@ibm.com	https://www.linkedin.com/in/arpita-majumder-85612a67/
3	Mindshare (Inclusive Minds)	Pamindar Singh	Team Lead		8713901 984	paminder.singh@themindshare.in	https://www.linkedin.com/in/paminder-singh-7990b8101/
4	Freelance SME (Ex-3i Infotech)	Rishi Agrawal	Ex-SVP and Global Delivery Head – Automations, Applications and Analytics	-	7702191 049	agrishi@gmail.com	https://www.linkedin.com/in/agris-hi/
5	Acolyte	Saranya	Research Analyst		9944313 170	saranyakathir128@gmail.com	
6	Verizon	Sudeesh Sankaravel	Fellow Data Scientist	-	9176433 113	sudeesh.sankaravel@verizon.com	https://www.linkedin.com/in/sudeesh-sankaravel
7	Amazon	Asvin Ragav R	Data Associate		9994308 478	asvinragav16@gmail.com	
8	Sutherland	Nausath Raja	Sr. Director-Platform Solutions Group	-	9940113 955	naushathraja.mohammed@sutherlandglobal.com	https://www.linkedin.com/in/naushath-raja-mohammed-4b7080b6/
9	Forbes Advisor	Naveenkumar Janakiraman	Data Research Analyst		9976773 109	naveenkumarj4997@gmail.com	https://www.linkedin.com/in/naveenkumar-janakiraman
10	Frontier	Santhosh kumar S	DevOps L1		9655747 400	santhoshselvaraj24031998@gmail.com	
11	Accolite Digital	Ayushmaan Pandey	Senior Software Engineer	-	8077386 365	ayushmaan.pandey@accolitedigital.com	https://www.linkedin.com/in/ayushmaanpandey
12	Impekable	sreepathi.D	Lead Market Research and Business Development		9655036 999	sanjeevsree22@gmail.com	
13	Data Switch	Thilak hariharaSudhan A	Product Engineer	DataSwitch, Chennai	6393798 750	thilakhariharan@gmail.com	https://www.linkedin.com/in/thilak-hariharasudhan-43a89b269/
14	Kornferry	Ragul	Data analyst	-	9659964 881	ragulblooper143@gmail.com	https://www.linkedin.com/in/ragul-kumar-b2297a171/

15	Navitas life sciences Chennai	Gowtham K V	Junior Research associate	-	9994594 693	gg17165322@gmail.com	
16	Intellibren	Kailash PD	Director	Intellibren services LLP	6374700 185	kailash@intellibren.com	-
17	Openweaver	Ashok Balasubramanian	Founder & CEO	-	9962548 366	ashok@openweaver.com	https://www.linkedin.com/in/ashok-balasubramanian/
18	Upgrad	Samneesh Sharma	Sr Manager-project delivery		8679334 000	shamneesh.sharma@upgrad.com	https://www.linkedin.com/in/shamneeshsharma1987/
19	Q Acadmey	Deepak Gour	Product and Academic Head	-	9893554 394	deepak@qacademy.ca	https://ca.linkedin.com/in/deepak-gour-8853968
20	Tata consultancy services	Karthiga N	Test Analyst	-	7092257 551	karthiga0115@gmail.com	
21	Wipro	Narendra Nande	Practice Director (VLSI SW and PSV Practice)	-	9900086 708	narendra.nande@wipro.com	https://www.linkedin.com/in/narendra-nande-84402a2/

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	200		40		20	
2024-25	400		80		40	
2025-26	400		80		40	

Data to be provided year-wise for the next 3 years.

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

Qualification	Year	Total Candidates	Women	People with disability
---------------	------	------------------	-------	------------------------

Version		Trained	Assessed	Certified	Trained	Assessed	Certified	Trained	Assessed	Certified

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

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

1.

Content availability for 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/ Candidate 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/N8113: Design new Solution architectures as per specifications	PC.1 Identify and prioritize business requirements through stakeholder engagement and analysis.	2	4	-	1
	PC.2 Evaluate the underlying platform, considering scalability, performance, and compatibility with existing systems	2	4	-	1
	PC.3 Assess data governance, privacy regulations and security requirements in a global context.	2	4	-	1
	PC.4 Select design standards, methodologies, and tools that align with best practices and project objectives	2	4	-	2
	PC.5 Define system level architecture for the solution	2	5	-	2
	PC.6 Design data feeds and implement data quality checks to ensure reliable data integration	3	5	-	2
	PC.7 Define detailed component specifications	3	4	-	2
	PC.8 Translate component specifications into detailed designs for implementation	3	4	-	2
	PC.9 Conduct impact analysis to assess the implications of major design choices on the overall architecture	3	4	-	2
	PC.10 Develop a technical capabilities roadmap for new solution architectures, ensuring alignment with organizational strategy and technological advancements.	3	4	-	2
	PC.11 Document designed solution architectures for relevant stakeholders, ensuring clarity and accessibility.	3	4	-	2
	PC.12 Collaborate with stakeholders to validate and refine solution architectures.	2	4	-	1
	Total Marks	30	50	-	20
SSC/N8114: Maintain existing architectures for solutions	PC.1 Establish data quality metrics and oversee processes for continuous monitoring.	3	5	-	2
	PC.2 Troubleshoot and resolve issues with new solution architectures.	3	5	-	2
	PC.3 Identify potential project risks and develop mitigation strategies in collaboration with stakeholders.	3	5	-	2

NOS/Module Name	Assessment Criteria for Performance Criteria/Learning Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
	PC.4 Review existing system architecture designs to ensure a balance of functional, service quality, and systems management requirements.	3	4	-	2
	PC.5 Review existing system architecture designs to ensure the selection of appropriate technology, efficient use of resources, and integration of multiple systems.	3	4	-	2
	PC.6 Review technical capabilities roadmap for existing solution architectures to support ongoing improvements and address current technological needs.	3	4	-	2
	PC.7 Continuously monitor and adapt to evolving design standards and industry trends.	3	5	-	2
	PC.8 Update documentation on existing solution architectures for appropriate people.	2	5	-	2
	PC.9 Provide training for relevant teams on implemented architectures to ensure effective utilization.	2	4	-	1
	PC.10 Stay informed about advancements in AI and related technologies to maintain a competitive edge.	3	5	-	2
	PC.11 Promote collaboration across different teams to foster innovation and better integration of AI solutions.	2	4	-	1
	Total Marks	30	50	-	20
SSC/Q8159: Ensure Compliance and Ethical Standards	PC.1 Conduct reviews to ensure AI solutions comply with data protection laws and regulations	3	5	-	2
	PC.2 Develop and implement policies and procedures to support compliance efforts.	3	5	-	2
	PC.3 Evaluate AI models and algorithms for bias, fairness, and transparency.	3	5	-	2
	PC.4 Establish guidelines for ethical AI usage and conduct regular audits to ensure adherence.	3	5	-	2
	PC.5 Identify potential ethical and compliance risks associated with AI implementations.	3	5	-	2
	PC.6 Develop risk mitigation strategies to address compliance and ethical concerns.	3	5	-	2
	PC.7 Communicate compliance and ethical considerations to stakeholders clearly and effectively.	3	5	-	2
	PC.8 Provide training for team members on compliance requirements and ethical AI principles.	3	5	-	2
	PC.9 Monitor changes in legal regulations and ethical standards related to AI.	3	5	-	2
	PC.10 Modify practices and procedures to remain compliant with evolving guidelines.	3	5	-	2
	Total Marks	30	50	-	20
SSC/N-8160: Monitor and Evaluate AI-	PC.1 Establish key performance indicators (KPIs) to measure the effectiveness of AI solutions.	3	5	-	2
	PC.2 Align metrics with business objectives to ensure relevance.	3	5	-	2
	PC.3 Conduct regular data analyses to evaluate the performance of AI systems.	3	5	-	2
	PC.4 Utilize analytics tools to track and visualize performance trends over time.	3	5	-	2

NOS/Module Name	Assessment Criteria for Performance Criteria/Learning Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Solution Performance	PC.5 Compile reports detailing the performance of AI solutions, including successes and areas for improvement.	3	5	-	2
	PC.6 Provide actionable recommendations based on performance evaluations to enhance system effectiveness.	3	5	-	2
	PC.7 Gather feedback from end-users to assess the practical impact of AI solutions.	3	5	-	2
	PC.8 Incorporate user insights into future iterations or enhancements of AI architectures.	3	5	-	2
	PC.9 Identify opportunities for optimization based on performance data and feedback.	3	5	-	2
	PC.10 Implement updates and enhancements to AI solutions to improve overall efficiency and effectiveness.	3	5	-	2
	Total Marks	30	50	-	20
DGT/VSQ/N0102 Employability NOS for 60 Hours	PC.1 Introduction to Employability Skills	1	1	-	-
	PC.2 Constitutional values – Citizenship	1	1	-	-
	PC.3 Becoming a Professional in the 21st Century	2	4	-	-
	PC.4 Basic English Skills	2	3	-	-
	PC.5 Career Development & Goal Setting	1	2	-	-
	PC.6 Communication Skills	2	2	-	-
	PC.7 Diversity & Inclusion	1	2	-	-
	PC.8 Financial and Legal Literacy	2	3	-	-
	PC.9 Essential Digital Skills	3	4	-	-
	PC.10 Entrepreneurship	2	3	-	-
	PC.11 Customer Service	1	2	-	-
	PC.12 Getting Ready for Apprenticeship & Jobs	2	3	-	-
	Total Marks	20	30	-	-
		140	230	-	80

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 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 based on their main economic function, product, service or technology.

NSQC Approved