QUALIFICATION FILE – Micro Credentials

< Introduction To Confined Space Challenges & Safety Measures>

☐ Public ☒ Private

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

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

NCrF/NSQF Level: 3

Submitted By:

<SAFETY SKILL DEVELOPMENT FOUNDATION>

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Table of Contents

Section 1: Basic Details

<table>
<tr><td>1.</td><td>Micro Credential-Qualification Name</td><td colspan="2">Introduction To Confined Space Challenges & Safety Measures</td></tr>
<tr><td>2.</td><td>Sector/s</td><td colspan="2">Education, Training & Research; Construction, Infrastructure, Real estate, Iron & Steel, Mining, Logistics, Hydrocarbon and others</td></tr>
<tr><td>3.</td><td>National Qualification Register (NQR) Code & Version (Will be issued after NSQC approval.)</td><td>NM-03-ET-04312-2025-V1-SSDF</td><td>4. NCrF/NSQF Level: 3</td></tr>
<tr><td>5.</td><td>Brief Description of the Micro Credential</td><td colspan="2">The confined spaces like ducts, vessels, boilers, culverts, tunnels, boreholes, manholes, excavations, sumps, inspection pits, experimental hutches etc., present potential hazards to individuals working within them due to factors such as restricted ventilation, limited mobility, and the presence of hazardous substances. The MC deals with confined space safety challenges for workers and measures to be taken, training & emergency preparedness.</td></tr>
<tr><td>6.</td><td>Eligibility Criteria for Entry for Students/Trainee/Learner/Employee</td><td colspan="2">a. Entry Qualification & Relevant Experience
<table>
<tr><th>S. No.</th><th>Academic/Skill Qualification (with specialization- if applicable)</th><th>Relevant Experience (with specialization- if applicable)</th></tr>
<tr><td>1</td><td>10th grade pass or equivalent</td><td>3</td></tr>
<tr><td>2</td><td>Previous relevant Qualification of NSQF Level 2.5</td><td>1.5</td></tr>
</table>
b. Age: NA</td></tr>
<tr><td>7.</td><td>Credits Assigned to this Qualification, Subject to Assessment (as per National Credit Framework (NCrF))</td><td>0.5</td><td>8. Common Cost Norm Category (I/II/III) (wherever applicable): I</td></tr>
<tr><td>9.</td><td>Any Licensing Requirements/ Pre-requisites for Undertaking Training (wherever applicable)</td><td colspan="2">NA</td></tr>
<tr><td>10.</td><td>Expected Outcomes of the Micro Credential</td><td colspan="2">Terminal learning outcomes are:
1. Challenges posed by confined space for workers.
2. Remedial measures for working in confined spaces.</td></tr>
</table>

<table>
<tr><td></td><td></td><td colspan="2">3. Safety measures to be taken while working in confined spaces.</td></tr>
<tr><td>11.</td><td>Training Duration by Modes of Training Delivery (Specify Total Duration as per selected training delivery modes and as per requirement of the qualification)</td><td colspan="2">☒ Offline Only ☐ Online Only ☐ Blended
<table>
<tr><th>Training Delivery Mode</th><th>Theory (Hours)</th><th>Practical (Hours)</th><th>Total (Hours)</th></tr>
<tr><td>Classroom (offline)</td><td>8</td><td>7</td><td>15</td></tr>
<tr><td>Online</td><td>-</td><td>-</td><td>-</td></tr>
</table>
(Refer Blended Learning Annexure for Details)</td></tr>
<tr><td>12.</td><td>Assessment Criteria</td><td colspan="2">
<table>
<tr><th>Theory (Marks)</th><th>Practical (Marks)</th><th>Project (Marks)</th><th>Viva (Marks)</th><th>Total (Marks)</th><th>Passing %age</th></tr>
<tr><td>50</td><td>50</td><td>-</td><td>-</td><td>100</td><td>50</td></tr>
</table>
</td></tr>
<tr><td>13.</td><td>Is the Qualification Amenable to Persons with Disability</td><td colspan="2">☒ Yes ☐ No If “Yes,” specify applicable type of Disability:</td></tr>
<tr><td>14.</td><td>How participation of women will be encouraged?</td><td colspan="2">Women will be encouraged to join</td></tr>
<tr><td>15.</td><td>Other Indian Languages in which the Micro Credential will be implemented.</td><td colspan="2">English and Hindi</td></tr>
<tr><td>16.</td><td>Is similar Micro Credential Qualification(s) available on NQR-if yes, justification for this qualification</td><td colspan="2">☐ Yes ☒ No URLs of similar Qualifications:</td></tr>
<tr><td>17.</td><td>Name and Contact Details Submitting / Awarding Body SPOC</td><td colspan="2">Name: Anand Kumar Singh
Email: aksingh@ssdfindia.org
Contact No.: +91-8505955506
Website: www.ssdfindia.org</td></tr>
<tr><td>18.</td><td>NSQC Approval Date: 08-05-2025</td><td>19. Validity Duration: 3 Years</td><td>20. Next Review Date: 08-05-2028</td></tr>
</table>

Section 2: Training Related

1.	**Trainer's Qualification and experience in relevant sector (in years)** *(as per requirement and NCVET guidelines)*	M. Tech/ B. Tech with 1 years' experience. Graduate in any discipline / Diploma in Engineering with 3 years' experience. ITI/12TH with 5 years' experience.
2.	**Master Trainer's Qualification and experience in relevant sector (in years)** *(as per requirement and NCVET guidelines)*	M. Tech/ B. Tech with 2 years' experience. Graduate in any discipline / Diploma in Engineering with 4 years' experience. ITI/12TH with 6 years' experience.
3.	**Tools and Equipment Required for Training**	☒ **Yes** ☐ **No** *(If "Yes," details to be provided in Annexure)*

Section 3: Assessment Related

1.	**Assessor's Qualification and experience in relevant sector (in years)** *(as per requirement and NCVET guidelines)*	M. Tech/ B. Tech with 1 years' experience. Graduate in any discipline / Diploma in Engineering with 3 years' experience. ITI/12TH with 5 years' experience.
2.	**Proctor's Qualification and experience in relevant sector (in years)** *(as per requirement and NCVET guidelines)*	M. Tech/ B. Tech Graduate in any discipline / Diploma in Engineering with 2 years' experience. ITI/12TH with 4 years' experience.
3.	**Lead Assessor's/Proctor's Qualification and experience in relevant sector (in years)** *(as per requirement and NCVET guidelines)*	M. Tech/ B. Tech with 2 years' experience. Graduate in any discipline / Diploma in Engineering with 4 years' experience. ITI/12TH with 6 years' experience.
4.	**Assessment Mode** *(Specify the assessment mode)*	**Mode: ☒ Online Only ☐ Offline Only ☒ Blended**
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 4: Evidence of Need of the Micro Credential

As per the NCVET Guidelines for evidence of need, provide the required Annexure/Supporting documents.

1.	Government /Industry initiatives/ requirement (Yes/No):No
2.	Number of Industry validation provided: *5*
3.	Estimated number of people to be trained: 25,000

Section 5: Annexure Check List

Specify Annexure Number and Name.

1.	**Annexure:** NCrF/NSQF level justification based on NCrF Level/NSQF descriptors *(Mandatory)*	Yes
2.	**Annexure:** Learning Outcomes and Assessment Criteria *(Mandatory)*	Yes
3.	**Annexure:** Assessment Strategy *(Mandatory)*	Yes
4.	**Annexure:** List of tools and equipment relevant for qualification *(Mandatory – Except in case of online course)*	Yes
5.	**Annexure:** Blended Learning *(Mandatory in case selected mode of delivery is "Blended Learning")*	*No*

6.	**Annexure:** Acronym and Glossary *(Optional)*	Yes

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	• Conduct a thorough assessment of the confined space before entry, including identifying hazards, evaluating the need for ventilation, and determining necessary equipment. • Implement ventilation procedures to ensure the atmosphere is safe for entry. This may involve continuous or intermittent ventilation to maintain safe oxygen levels and remove contaminants. • Ensure that appropriate PPE is worn by all personnel entering the confined space, including respirators, gloves, and protective clothing. • Assign a safety watch or attendant to continuously monitor the confined space and the health and safety of workers inside. • Follow established emergency procedures in case of an incident, including evacuation, rescue, and medical response.	At NSQF Level 4, the role involves advanced theoretical knowledge and practical processes in confined space work, emphasizing complex hazard management, regulatory compliance, and effective risk mitigation. This includes detailed planning, supervision, and emergency response, ensuring that confined space operations are conducted safely and efficiently.	3.0

	• Follow procedures for decontaminating equipment and removing any contaminants before leaving the confined space.		
Professional and Technical Skills/ Expertise/ Professional Knowledge	• Proficiency in conducting detailed risk assessments and determining appropriate control measures to mitigate identified risks. • Ability to interpret and apply complex regulatory requirements to ensure compliance in confined space operations. • Understanding of how to interpret data from monitoring equipment and make decisions based on this data. • Detailed knowledge of the step-by-step procedures required for safe confined space entry and work. • In-depth understanding of the different types of confined spaces, their characteristics, and the associated risks and challenges. • Comprehensive knowledge of safety protocols, best practices, and industry standards for confined space work.	At NSQF Level 4, the professional and technical skills, expertise, and knowledge required for confined space work involve managing complex hazards, ensuring compliance with advanced safety regulations, and executing detailed procedures. This level requires a high degree of technical proficiency, leadership in emergency situations, and comprehensive understanding of both theoretical and practical aspects of confined space operations.	3.0
Employment Readiness & Entrepreneurship Skills & Mind-set/Professional Skill	• Demonstrate a solid understanding of confined space safety procedures, risk assessment, and emergency response protocols. • Ability to identify and resolve issues related to confined space entry and	• This level requires the ability to perform complex tasks with minimal supervision and handle sophisticated equipment and procedures relevant to confined space operations.	3.0

	work, such as equipment malfunctions or unexpected hazards. ● Ability to assess and manage risks associated with confined space work, including developing strategies to mitigate potential issues. ● Implement new techniques or technologies to improve confined space safety and efficiency. ● A strong commitment to safety and adherence to all safety protocols and procedures, prioritizing the well-being of oneself and others.	● Expected to use critical thinking and problem-solving skills to manage complex and unpredictable scenarios independently. ● Requires thoroughness and precision in tasks, with a strong emphasis on adhering to safety and regulatory standards. ● Expected to demonstrate an entrepreneurial mindset by proactively managing risks and implementing innovative solutions ● Encouraged to seek and implement improvements and advancements in confined space practices. ● Emphasizes the importance of safety and quality, reflecting a professional attitude towards achieving high standards ● Requires maintaining high ethical standards and taking responsibility for one's actions and decisions.	
Broad Learning Outcomes/Core Skill	● Gain a comprehensive understanding of the definitions, types, and characteristics of confined spaces. ● Develop skills in assessing and managing risks associated with confined space work. ● Acquire in-depth knowledge of relevant safety regulations, standards, and best practices for confined space work.	● Requires the ability to manage complex risk scenarios and implement effective mitigation strategies. ● Involves a high level of adherence to detailed safety practices and procedures. ● Reflects a high level of technical proficiency and the ability to	3.0

	● Learn to prepare for and respond effectively to emergencies and incidents in confined spaces ● Gain technical proficiency in using specialized equipment and following procedures for confined space entry and work.	manage complex equipment and systems. ● Requires leadership and advanced skills in managing emergencies and ensuring effective rescue efforts. ● Involves ensuring adherence to complex regulations and standards. ● Emphasizes effective collaboration and coordination among team members and stakeholders.	
Responsibility	● Perform thorough risk assessments to identify potential hazards associated with confined spaces ● Develop and enforce safety protocols and procedures for confined space entry and work. ● Ensure compliance with local, national, and international safety regulations and standards related to confined space ● Oversee the issuance and management of confined space entry permits. ● Supervise and train personnel involved in confined space work. ● Ensure that all equipment used in confined space operations is properly maintained and functioning. ● Develop and implement emergency response plans and lead rescue operations if required.	● At this level, individuals are expected to handle complex risk assessments independently, demonstrating advanced analytical skills and a deep understanding of potential hazards. ● Requires a high level of expertise in establishing and maintaining safety standards and procedures, ensuring that all aspects of confined space operations are managed effectively. ● Involves a comprehensive understanding of regulatory requirements and the ability to apply these standards in practice to ensure compliance. ● Requires detailed knowledge of permit requirements and the ability to manage and verify compliance with entry conditions ● Involves leadership and mentorship responsibilities, ensuring that team	3.0

	• Perform regular safety audits and inspections of confined space operations.	members are well-trained and adhere to safety protocols.	

Annexure: Learning Outcomes and Assessment Criteria

Detailed learning outcomes and assessment criteria for the qualification are as follows:

S. No.	Learning Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
1.	PC-1 Enumerate & understand risks & challenges for working conditions in confined spaces due to Limited Access and Egress, Poor Ventilation and Hazardous Atmospheres, Communication Difficulties, Psychological and Physical Strain, Rescue and Medical Care Complexity.	5	5	-	-
2.	PC-2 Assess the risks while working in a confined space and measures to be taken.	5	5	-	-
3.	PC-3 Understand measurement & surveillance equipments, including remotely monitored, for measurement of presence of dangerous substances in the confined space.	5	5	-	-
4.	PC-4 Isolate confined spaces to prevent the entry of hazardous or dangerous substances.	5	5	-	-
5.	PC-5 Create & understand working environment, precautions for work in areas, mechanical ventilation, use of protected-low voltage equipment.	5	5	-	-
6.	PC-6 Prepare entry controls, permit to work system and process safety for working in confined spaces.	5	5	-	-
7.	PC-7 Plan & conduct training & use of PPEs.	5	5	-	-
8.	PC-8 Know national, international regulations and standards governing confined space entry and work.	5	5	-	-

9	PC-9 Plan measures for emergency situations or in case of any incident.	5	5		
10	PC-10 Develop strategies to effectively navigate and exit panic situations.	5	5		
Total Marks		**50**	**50**	-	-

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 are assigned to the assessment agencies for conducting the assessment on SIP/Portal or email.
- Assessment agencies send the assessment confirmation to VTP/TC looping Awarding Body(AB)
- Assessment agency deploys the ToA certified Assessor for executing the assessment.
- AB ensures the assessment process & records.

2. Testing Environment:

- Check the assessment location, date, and time.
- 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 AA/Subject Matter Experts (SME) are verified by the other SME.
- Questions are mapped to the specified assessment criteria.
- Assessor will be ToA certified & trainer will 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.
- Method for assessment documentation, archiving, and access
- Soft/Hard copies of the documents are stored.

On the Job:

1. The candidate works for all modules.

2. The candidate must score 50% in assessment to successfully complete the OJT.
3. Tools of Assessment that will be used for assessing whether the candidate is having desired skills, understanding needs & requirements.
   • Report prepared by trainees during OJT.
4. Assessment of task ensure that the candidate can perform all tasks of the job role required:

Annexure: Tools and Equipment

List of Tools and Equipment

Batch Size: 30

No	Tools/Equipment Name	Specifications	Quantity for specified Batch size
•	Safety Helmet	Nos	2
•	Safety Gloves	Nos	2
•	Reflective jackets	Nos	2
•	Safety gumboots	Nos	2
•	Safety shoes	Nos	2
•	Safety belt	Nos	2
•	Safety harness	Nos	1
•	High visibility jackets	Nos	1
•	First Aid box	Number	1
•	Safety Cone	Number	2

•	Caution Boards	set	2
•	Safety Sign Boards	Number	2

Classroom Aids:

The aids required to conduct sessions in the classroom are:

1. Black/White board
2. Marker
3. Projector
4. Computer with relevant software

Annexure: Industry Validations Summary

S. No	Organization Name	Representative Name	Designation	Contact Address	Contact Phone No	E-mail ID	LinkedIn Profile *(if available)*
1	Shapoorji Pallonji and Co. Pvt Ltd	Mr. Nitin Bansal	Manager QAQC	SP Centre, 41/44, Minoo Desai Marg, Colaba, Mumbai - 400005 Maharashtra, India Tel: +91-22-67490000	8130090463	nitin.bansal@shapoorji.com	-
2	Tata Advanced Systems	Asheesh Singhal	Deputy Manager	Plot no.C-01, 401, 4th Floor, World Trade Tower Sector sixteen, Noida Uttar	7290014317	apkumar@tataadvancedsystems.com	-

				Pradesh-201301 India Tel +91 120 4847450 -7555 I Fax 91 11 43602735			
3	SIMPLEX Infrastructures Limited	Tarak Bhaumik	General Manager (HR&Admin)	Simplex House 27, Shakespeare Sarani, Kolkata-700 017 Tel: (91 33) 23011600 Fax: (91 33) 2283 5966 / 65	-	-	-
4	TECHNOCULTURE Building Center Pvt Ltd	Anurag Tiwari	Manager	Konark Shree Apartment, RBI Road, 301/302, Brajkishore Path, Ali Nagar Colony, Salimpur Ahra, Dujra Diara, Patna, Bihar 800001	9006506858	vastu.skills@gmail.com	-
5	Urja Building Services Consultants Pvt Ltd	Sheetal Mandar Bhilkar	Managing Director	648,649, Laxmi Plaza, Laxmi Industrial Estate, Suresh Nagar, Andheri West, Mumbai, Maharashtra 400053	9819819212	sheetalbhilkar@urjagroup.in	-

Annexure: Training Details

Training Projections:

Year	Estimated Training # Total Candidates		Estimated Training # of Women		Estimated Training # People with Disability	
	Estimated Training #	Estimated Employment Opportunities	Estimated Training #	Estimated Employment Opportunities	Estimated Training #	Estimated Employment Opportunities
2024	800	800	120	120	250	250
2025	1400	1400	200	200	450	450
2026	1400	1400	200	100	450	450

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

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
NQR	National Qualification Register
NSQF	National Skills Qualifications Framework
OJT	On the Job Training

Glossary

Term	Description
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.