



QUALIFICATION FILE

< Assistant Manual Metal Arc Welding/ Shielded Metal Arc Welding Welder >

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: 2

Submitted By:

< Capital Goods and Strategic Skill Council >

< 39, 1st Floor, Samyak Tower, Pusa Road, New Delhi-110005 >

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Section 1: Basic Details

1.	Qualification Name	Assistant Manual Metal Arc Welding/ Shielded Metal Arc Welding Welder										
2.	Sector/s	Capital Goods and Manufacturing										
3.	Type of Qualification: <input type="checkbox"/> New <input checked="" type="checkbox"/> Revised <input type="checkbox"/> Has Electives/Options <input type="checkbox"/> OEM	NQR Code & version of existing/previous qualification: <i>(change to previous, once approved) 2022/CCM/CGSC/06603 V2.0</i>	Qualification Name of existing/previous version: Assistant Manual Metal Arc Welding/ Shielded Metal Arc Welding Welder									
4.	a. OEM Name b. Qualification Name <i>(Wherever applicable)</i>											
5.	National Qualification Register (NQR) Code &Version <i>(Will be issued after NSQC approval)</i>	QG-02-CG-03939-2025-V2-CGSSC V3.0	6. NCrF/NSQF Level: 2									
7.	Award (Certificate/Diploma/Advance Diploma/ Any Other <i>(Wherever applicable specify multiple entry/exits also & provide details in annexure)</i>	Certificate										
8.	Brief Description of the Qualification	The incumbent in the job is primarily involved in all manual metal arc welding (MMAW) and gas cutting operations performed on carbon and low alloy steels.										
9.	Eligibility Criteria for Entry for Student/Trainee/Learner/Employee	a. Entry Qualification & Relevant Experience: <table border="1" style="margin-left: 20px;"> <thead> <tr> <th>S. No.</th> <th>Academic/Skill Qualification (with Specialization - if applicable)</th> <th>Required Experience (with Specialization - if applicable)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Ability to read and write, wherever required</td> <td>Not Required</td> </tr> <tr> <td>2</td> <td>Previous relevant qualification of NSQF Level 1 or equivalent</td> <td>Not Required</td> </tr> </tbody> </table>		S. No.	Academic/Skill Qualification (with Specialization - if applicable)	Required Experience (with Specialization - if applicable)	1	Ability to read and write, wherever required	Not Required	2	Previous relevant qualification of NSQF Level 1 or equivalent	Not Required
S. No.	Academic/Skill Qualification (with Specialization - if applicable)	Required Experience (with Specialization - if applicable)										
1	Ability to read and write, wherever required	Not Required										
2	Previous relevant qualification of NSQF Level 1 or equivalent	Not Required										

		b. Age: <18 Years>				
10. Credits Assigned to this Qualification, Subject to Assessment (as per National Credit Framework (NCrF))	9	11. Common Cost Norm Category (I/II/III) (wherever applicable): I				
12. Any Licensing requirements for Undertaking Training on This Qualification (wherever applicable)						
13. Training Duration by Modes of Training Delivery (Specify Total Duration as per selected training delivery modes and as per requirement of the qualification)	<input checked="" type="checkbox"/> Offline <input type="checkbox"/> Online <input type="checkbox"/> Blended					
	Training Delivery Modes	Theory (Hours)	Practical (Hours)	OJT Mandatory (Hours)	Viva (Hours)	Total (Hours)
	Classroom (offline)	87	183	-	-	270
	Online					
(Refer Blended Learning Annexure for details)						
14. Aligned to NCO/ISCO Code/s (if no code is available mention the same)	NCO-2015/7212.0200					
15. Progression path after attaining the qualification (Please show Professional and Academic progression)	MMAW/SMAW Welder -Level 3 Senior Welder (Pipes & Plates)- Level 4					
16. Other Indian languages in which the Qualification & Model Curriculum are being submitted						
17. Is similar Qualification(s) available on NQR-if yes, justification for this qualification	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No URLs of similar Qualifications:					
18. Is the Job Role Amenable to Persons with Disability	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If "Yes", specify applicable type of Disability:					
19. How Participation of Women will be Encouraged	Yes via Industry or College Engagement					
20. Are Greening/ Environment Sustainability Aspects Covered (Specify the NOS/Module which covers it)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
21. Is Qualification Suitable to be Offered in Schools/Colleges	Schools <input type="checkbox"/> Yes <input type="checkbox"/> No Colleges <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No					
22. Name and Contact Details of Submitting / Awarding Body SPOC (In case of CS or MS, provide details of both Lead AB & Supporting ABs)	Name: Ridhima Sharma Email : technicaladvisors@cgssc.org Contact No.: +91-8882907092 Website: www.cgssc.org					
23. Final Approval Date by NSQC:	24. Validity Duration: 3 Years		25. Next Review Date			

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 Vi-Niva

S. No	NOS/Module Name	NOS/Module Code & Version (if applicable)	Core/Non-Core	NCrF/N SQF 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.	Bridge Module & Follow the health and safety practices at work	CSC/N1335 NOS Version; 2.0	Non-Core	3	2	25	35	-	-	60	30	70	-	-	100	15
2.	Coordinate with co-workers to achieve work efficiency.	CSC/N1336: Version No. 2.0	Non-Core	3	1	10	20	-	-	30	30	70	-	-	100	15
3.	Support MMAW welder in welding and cutting process	CSC/N0202: Version No. – 2.0	Core	2	5	40	110	-	-	150	30	50	-	20	100	60
4.	DGT/VSQ/N0101 - Employability Skills (30 hours)	NOS Version No. – 1.0	ES	4	1	12	18	-	-	30	20	30	-	-	50	10
Duration (in Hours) / Total Marks					9	87	183	-	-	270	110	220	-	20	350	100

Elective NOS/s:

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

S. No	NOS/Module Name	NOS/Module Code & Version (if applicable)	Core/Non-Core	NCrF/N SQF 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/N SQF 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: 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)	Trainer Prerequisites						Remarks
		Minimum Educational Qualification	Specialization	Relevant Industry Experience		Training Experience		
				Years	Specialization	Years	Specialization	

		Diploma	Mechanical	2	Welding	1	Welding	NA																																								
		B.E/B.Tech	Mechanical	1	Welding	1	Welding	NA																																								
2.	Master Trainer’s Qualification and experience in the relevant sector (in years) (as per NCVET guidelines)	<table border="1"> <thead> <tr> <th colspan="8">Master Trainer Prerequisites</th> </tr> <tr> <th rowspan="2">Minimum Educational Qualification</th> <th rowspan="2">Specialization</th> <th colspan="2">Relevant Industry Experience</th> <th colspan="2">Training Experience</th> <th rowspan="2">Remarks</th> </tr> <tr> <th>Years</th> <th>Specialization</th> <th>Years</th> <th>Specialization</th> </tr> </thead> <tbody> <tr> <td>B.E/B.Tech</td> <td>Mechanical/Electrical/Electronics/Automobile/Instrumentation</td> <td>6</td> <td>Mechanical/Electrical/Electronics/Automobile/Instrumentation</td> <td>2</td> <td>Mechanical/Electrical/Electronics/Automobile/Instrumentation</td> <td>NA</td> </tr> <tr> <td>B.E/B.Tech</td> <td>Mechanical/Electrical/Electronics/Automobile/Instrumentation</td> <td>7</td> <td>Mechanical/Electrical/Electronics/Automobile/Instrumentation</td> <td>1</td> <td>Mechanical/Electrical/Electronics/Automobile/Instrumentation</td> <td>NA</td> </tr> <tr> <td>M.E/M.Tech</td> <td>Mechanical/Electrical/Electronics/Automobile/Instrumentation</td> <td>4</td> <td>Mechanical/Electrical/Electronics/Automobile/Instrumentation</td> <td>2</td> <td>Mechanical/Electrical/Electronics/Automobile/Instrumentation</td> <td>NA</td> </tr> </tbody> </table>							Master Trainer Prerequisites								Minimum Educational Qualification	Specialization	Relevant Industry Experience		Training Experience		Remarks	Years	Specialization	Years	Specialization	B.E/B.Tech	Mechanical/Electrical/Electronics/Automobile/Instrumentation	6	Mechanical/Electrical/Electronics/Automobile/Instrumentation	2	Mechanical/Electrical/Electronics/Automobile/Instrumentation	NA	B.E/B.Tech	Mechanical/Electrical/Electronics/Automobile/Instrumentation	7	Mechanical/Electrical/Electronics/Automobile/Instrumentation	1	Mechanical/Electrical/Electronics/Automobile/Instrumentation	NA	M.E/M.Tech	Mechanical/Electrical/Electronics/Automobile/Instrumentation	4	Mechanical/Electrical/Electronics/Automobile/Instrumentation	2	Mechanical/Electrical/Electronics/Automobile/Instrumentation	NA
Master Trainer Prerequisites																																																
Minimum Educational Qualification	Specialization	Relevant Industry Experience		Training Experience		Remarks																																										
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B.E/B.Tech	Mechanical/Electrical/Electronics/Automobile/Instrumentation	6	Mechanical/Electrical/Electronics/Automobile/Instrumentation	2	Mechanical/Electrical/Electronics/Automobile/Instrumentation	NA																																										
B.E/B.Tech	Mechanical/Electrical/Electronics/Automobile/Instrumentation	7	Mechanical/Electrical/Electronics/Automobile/Instrumentation	1	Mechanical/Electrical/Electronics/Automobile/Instrumentation	NA																																										
M.E/M.Tech	Mechanical/Electrical/Electronics/Automobile/Instrumentation	4	Mechanical/Electrical/Electronics/Automobile/Instrumentation	2	Mechanical/Electrical/Electronics/Automobile/Instrumentation	NA																																										
3.	Tools and Equipment Required for Training	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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

Assessor’s Qualification and experience in relevant sector (in years) (as per NCVET guidelines)	Assessor Prerequisites
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	Minimum Educational Qualification	Specialization	Relevant Industry Experience		Training/Assessment Experience		Remarks
			Years	Specialization	Years	Specialization	
			Diploma	Mechanical	3	Welding	
B.E/B.Tech	Mechanical	2	Welding	2	Welding	NA	

Proctor's Qualification and experience in relevant sector (in years) (as per NCVET guidelines)	Proctor's Prerequisites						
	Minimum Educational Qualification	Specialization	Relevant Industry Experience		Training Experience		Remarks
			Years	Specialization	Years	Specialization	
B.E/B.Tech	Mechanical/Electrical/ Electronics/ Automobile/ Instrumentation	6	Mechanical/Electrical/ Electronics/ Automobile/ Instrumentation	2	Mechanical/Electrical/ Electronics/ Automobile/ Instrumentation	NA	
B.E/B.Tech	Mechanical/ Electrical/ Electronics/ Automobile/ Instrumentation	7	Mechanical/Electrical/ Electronics/ Automobile/ Instrumentation	1	Mechanical/Electrical/ Electronics/ Automobile/ Instrumentation	NA	
M.E/M.Tech	Mechanical/ Electrical/ Electronics/ Automobile/ Instrumentation	3	Mechanical/ Electrical/ Electronics/ Automobile/ Instrumentation	2	Mechanical/ Electrical/ Electronics/ Automobile/ Instrumentation	NA	

Lead Assessor's/Proctor's Qualification and experience in relevant sector (in years) (as per NCVET guidelines)	Proctor's Prerequisites						
	Minimum Educational Qualification	Specialization	Relevant Industry Experience		Training Experience		Remarks
			Years	Specialization	Years	Specialization	
B.E/B.Tech	Mechanical/Electrical/ Electronics/ Automobile/ Instrumentation	7	Mechanical/Electrical/ Electronics/ Automobile/ Instrumentation	2	Mechanical/Electrical/ Electronics/ Automobile/ Instrumentation	NA	
B.E/B.Tech	Mechanical/ Electrical/	8	Mechanical/Electrical/ Electronics/	1	Mechanical/Electrical/ Electronics/	NA	

			Electronics/ Automobile/ Instrumentation		Automobile/ Instrumentation		Automobile/ Instrumentation	
	M.E/M.Tech		Mechanical/ Electrical/ Electronics/ Automobile/ Instrumentation	4	Mechanical/ Electrical/ Electronics/ Automobile/ Instrumentation	2	Mechanical/ Electrical/ Electronics/ Automobile/ Instrumentation	NA
Assessment Mode (<i>Specify the assessment mode</i>)		Formative, Summative & Skill Assessment						
Tools and Equipment Required for Assessment		<input checked="" type="checkbox"/> Same as for training <input type="checkbox"/> Yes <input type="checkbox"/> No (<i>details to be provided in Annexure-if it is different for Assessment</i>)						

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): No
2.	Latest Market Research Reports or any other source (not older than 2 years) (Yes/No): No (Industry driven)
3.	Government /Industry initiatives/ requirement (Yes/No): Yes
4.	Number of Industry validation provided: NA
5.	Estimated nos. of persons to be trained and employed: 1360
6.	Evidence of Concurrence/Consultation with Line Ministry/State Departments: Yes 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 (<i>Mandatory</i>)	<i>Q File</i>
2.	Annexure: List of tools and equipment relevant for qualification (<i>Mandatory, except in case of online course</i>)	<i>Q File</i>
3.	Annexure: Detailed Assessment Criteria (<i>Mandatory</i>)	<i>Q File</i>
4.	Annexure: Assessment Strategy (<i>Mandatory</i>)	<i>Q File</i>

5.	Annexure: Blended Learning (<i>Mandatory, in case selected Mode of delivery is "Blended Learning"</i>)	
6.	Annexure: Multiple Entry-Exit Details (<i>Mandatory, in case qualification has multiple Entry-Exit</i>)	
7.	Annexure: Acronym and Glossary (<i>Optional</i>)	
8.	Supporting Document: Model Curriculum (<i>Mandatory – Public view</i>)	<i>Model Curriculum</i>
9.	Supporting Document: Career Progression (<i>Mandatory - Public view</i>)	
10.	Supporting Document: Occupational Map (<i>Mandatory</i>)	
11.	Supporting Document: Assessment SOP (<i>Mandatory</i>)	
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	Wide-ranging specialized theoretical learning requirements <ul style="list-style-type: none"> • Process of preparing the MMAW welding equipment • Process of conducting MMAW welding • Process of carrying out fault management • Process of inspecting the workpiece for quality check • Process of segregation and storage of output 	<p>The job involves a range of theoretical understanding and practical skills as can be seen from the job requirements given in the adjacent cell.</p> <p>The skills include setting, adjusting and operating MMAW welding apparatus and carrying out MMAW welding activities on given work piece</p>	2
Professional and Technical Skills/ Expertise/ Professional Knowledge	<ul style="list-style-type: none"> • Understand the concepts of MMAW welding. • Knowledge of relevant tools and equipment for conducting MMAW welding process. 	<p>As indicated by the knowledge and understanding requirements mentioned in the adjacent cell, the job holder needs to have a wide range of information for welding the metal by MMAW</p>	2

	<ul style="list-style-type: none"> • Knowledge of MMAW welding process. • Able to understand how to minimise risks from the hazards associated with carrying out MMAW welding 	welding process.	
Employment Readiness & Entrepreneurship Skills & Mind-set/Professional Skill	<ul style="list-style-type: none"> • Plan the gas cutting activities and prepare the appropriate schedules • Perform the operational/function checks • Carry out relevant documentation manually and/ or electronically • Determine the MMAW welding parameters • Operate MMAW welding apparatus for welding activities 	As indicated by the performance criteria in the adjacent cell, the job holder needs to have wide-ranging practical skills for welding the metal by MMAW welding process.	2
Broad Learning Outcomes/Core Skill	<p>Logical and mathematical skills</p> <ul style="list-style-type: none"> • Follow the technical specification and appropriate procedures. • Perform work-related calculations <p>Collecting and organising information</p> <ul style="list-style-type: none"> • Use the standard templates and tools for documenting work • Collect the relevant information concerning the MMAW welding process and carry out the appropriate documentation. 	<p>The job holder requires logical and relevant skills for conducting MMAW welding activities.</p> <p>As indicated by the performance criteria in the adjacent cell, the job involves conducting the MMAW welding process on various metals as per drawing and job order requirement.</p>	2
Responsibility	<ul style="list-style-type: none"> • Responsible for determining the work requirements • Responsible for planning the MMAW welding activities • Responsible for carrying out MMAW welding process. • Responsible for inspecting and testing the 	The incumbent in the job is primarily involved in all manual metal arc welding (MMAW) and gas cutting operations performed on carbon and low alloy steels. They support the welder in activities such as inspection of equipment	2

	welded workpieces. <ul style="list-style-type: none"> Responsible for preparing and updating the relevant documents. 	condition, welding, testing and inspection of welded work pieces.	
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Annexure: Tools and Equipment (Lab Set-Up)

List of Tools and Equipment

Batch Size: 20-25 Nos

S. No.	Tool / Equipment Name	Specification	Quantity for specified Batch size
1	Chairs/Tables		25
2	Computer with internet		25
3	LCD projector with screen		1
4	Trainer chair and Table		1
5	Demonstration table pin up boards		1
6	White board with marker		1
7	Work bench with vice		1
8	Power hacksaw		1
9	Power source MMAW welding set		1
10	Dye penetrant test kit		1
11	Magnetic particle testing kit		1
12	Fire Extinguisher		1

13	Safety Gloves (Rubber)		25
14	Ear Plugs		25
15	Safety Shoes & Helmet		25
16	Goggles		25
17	First-Aid Kit		2

Classroom Aids

The aids required to conduct sessions in the classroom are:

1. Computer / Laptop
2. Whiteboard and marker
3. Projector

Annexure: Industry Validations Summary

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

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
2025-2026	205	133	25	12	3	1
2026-2027	500	325	55	29	6	2
2027-2028	1360	884	150	80	15	8

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
	FY2022-2023	187	133	123	70	18	13	13	6	1	1	1	1
	FY2023-2024	455	204	183	100	45	20	18	9	4	2	1	1
	FY2024-2025	1237	470	377	200	123	47	37	22	12	4	3	2

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: *Not applicable*

1. PMKVY 4.0 CSM STT
2. Non PMKVY
3. TNSDC
4. Fee Based
5. NABARD
6. MSSDS
7. GSDM
8. SDIS Orissa State Skilling Scheme
9. NULM

10. SDIS DDU GKY

Content availability for previous versions of qualifications: PH

Participant Handbook Facilitator Guide Digital Content Qualification Handbook Any Other:

Languages in which Content is available: No

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>

Annexure: Detailed Assessment Criteria

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

CSC/N1335: Follow the health and safety practices at the work

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Maintain personal health and safety</i>	7	12	-	-
PC1. follow the recommended practices to ensure protection from infections and transmission to others, such as the use of hand sanitiser and face mask	2	3	-	-
PC2. check the work conditions, assess the potential health and safety risks, and take appropriate measures to mitigate them	1	2	-	-

PC3. select and use the appropriate Personal Protective Equipment (PPE) relevant to the task and work conditions	1	2	-	-
PC4. follow the recommended techniques while lifting and moving heavy objects to avoid injury	1	3	-	-
PC5. follow the manufacturer's instructions and workplace safety guidelines while working on heavy machinery, tools and equipment	2	2	-	-
<i>Assist in hazard management</i>	4	10	-	-
PC6. identify existing and potential hazards at work	1	1	-	-
PC7. assess the potential risks and injuries associated with the identified hazards	1	3	-	-
PC8. coordinate with the supervisor or other relevant personnel to prevent or minimise the identified hazards	1	3	-	-
PC9. handle hazardous materials safely and store them in the designated storage	1	3	-	-
<i>Check the first aid box, firefighting and safety equipment</i>	3	7	-	-
PC10. check the first aid box to ensure it is updated with the relevant first aid supplies	1	2	-	-

PC11. check and test the firefighting and various safety equipment to ensure they are in usable condition	1	3	-	-
Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC12. coordinate with the supervisor for the repair and replacement of firefighting and safety equipment	1	2	-	-
<i>Assist in waste management</i>	3	8	-	-
PC13. segregate waste into appropriate categories	1	3	-	-
PC14. recycle the recyclable waste appropriately	1	3	-	-
PC15. dispose of the non-recyclable waste in an environment-friendly manner, complying with the applicable regulations	1	2	-	-
<i>Follow the fire safety guidelines</i>	3	12	-	-
PC16. use the appropriate type of fire extinguisher to extinguish different types of fires safely	1	4	-	-
PC17. follow the recommended practices for a safe rescue during a fire emergency	1	4	-	-
PC18. coordinate with the fire department to request assistance to extinguish a serious fire	1	4	-	-
<i>Follow the emergency and first-aid procedures</i>	7	12	-	-

PC19. follow the organisational health and safety guidelines during workplace emergencies to ensure own and co-workers' safety	1	2	-	-
PC20. follow the recommended practices to minimise loss to organisational property during an emergency	1	3	-	-
PC21. follow the recommended procedure to free a person from electrocution	1	2	-	-
PC22. administer appropriate first aid to the injured personnel	1	2	-	-
PC23. perform Cardiopulmonary Resuscitation (CPR) on a potential victim of cardiac arrest	1	2	-	-
PC24. coordinate with the emergency services to request medical assistance for seriously injured/ ill personnel requiring professional medical attention or hospitalisation	2	1	-	-
Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Carry out relevant documentation and review</i>	3	9	-	-
PC25. carry out appropriate documentation following a health and safety incident at work, including all the required information	1	3	-	-
PC26. coordinate with the relevant personnel to review health and safety conditions at work regularly or following an incident	1	3	-	-

PC27. assist in implementing appropriate changes to improve the health and safety conditions at work	1	3	-	-
NOS Total	30	70	-	-

CSC/N1336: *Coordinate with co-workers to achieve work efficiency*

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Work effectively with co-workers</i>	20	43	-	-
PC1. plan daily tasks at work to ensure their timely completion and efficient use of time	2	4	-	-
PC2. carry out work responsibilities adhering to the limits of authority	2	4	-	-
PC3. follow the supervisor's instructions to ensure adherence to the applicable quality standards and timescales	2	4	-	-
PC4. coordinate with the co-workers to achieve the work objectives efficiently	2	4	-	-

PC5. prepare the relevant documents and reports as per the supervisor's instructions, providing appropriate information clearly and systematically	2	4	-	-
PC6. coordinate with the supervisor or relevant personnel to deal with out of authority tasks and concerns	2	4	-	-
PC7. mentor and assist subordinates in the execution of their work responsibilities	2	4	-	-
PC8. identify possible disruptions to work through coordination with the relevant stakeholders and take appropriate preventive measures	2	4	-	-
PC9. use various resources efficiently to ensure maximum utilisation and minimum wastage	2	4	-	-
PC10. follow the recommended practices to avoid and resolve conflicts at work	1	4	-	-
PC11. follow the relevant organisational policies to ensure disciplined behaviour with maximum productivity at work	1	3	-	-
<i>Communicate effectively with co-workers</i>	6	15	-	-

PC12. follow the organisational policy for the efficient and timely dissemination of information to the authorised personnel	2	5	-	-
Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC13. communicate clearly and politely to ensure effective communication with co-workers	2	5	-	-
PC14. follow the appropriate techniques for active listening during interactions	2	5	-	-
<i>Practice inclusion at work</i>	4	12	-	-
PC15. empathise with Persons with Disabilities (PWD)	2	6	-	-
PC16. adopt gender-neutral behaviour at work	2	6	-	-
NOS Total	30	70	-	100

CSC/N0202: Support MMAW welder in welding and cutting process

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Prepare for welding and cutting operations</i>	10	15	-	7
PC1. identify the work to be done and product specifications by interpreting the product drawing, and instructions received from MMAW welder	1	2	-	1
PC2. identify and arrange the tools, welding machines, cutting torches, measuring instruments, accessories, consumables and input materials (i.e. carbon, low alloy steel etc.) as per the requirements	3	2	-	2
PC3. check the input material, tools and equipment for any defects before use	1	2	-	1
PC4. prepare the work area for the welding and cutting activities	1	1	-	-
PC5. prepare the materials and joint for welding and cutting process	1	2	-	2
PC6. support the MMAW welder in setting of the MMAW/gas cutting machine and its parameters as per the WPS and SOP	2	3	-	1

PC7. install the work pieces and fixture on the apparatus and align them with the electrodes as per the job requirements	1	2	-	-
PC8. follow safety precautions during welding and cutting work as per SOP and organizational guidelines	-	1	-	-
<i>Support in MMAW/SMAW operations</i>	10	16	-	6
PC9. start the MMAW machine for welding operations	1	2	-	-
PC10. support the MMAW welder in performing MMAW welding process as per SOP	2	3	-	2
PC11. support the MMAW welder in producing different joints in all welding positions as specified in WPS	2	4	-	2
Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC12. provide appropriate consumables and accessories to welder during welding process	1	2	-	-
PC13. monitor the welding process parameters (air pressure, electrode force, electrode distance, gas flow etc.) are within standards by reading the various gauges and correct them if not within standards	1	1	-	1
PC14. measure the final welded piece and compare with the dimensions as prescribed in the WPS and engineering drawing	1	2	-	-

PC15. remove extra material, slag etc. by using brush, chipping hammers, grinders etc., from the welded piece	1	1	-	1
PC16. hammer the work piece to get the desired shape, if there are any welding bulges/distortions	1	1	-	-
Support in cutting operations	4	8	-	2
PC17. start the gas cutting machine for cutting operations	1	1	-	-
PC18. support the MMAW welder in performing gas cutting process as per SOP	1	2	-	1
PC19. support the MMAW welder in producing thermal cuts in various forms of material which meet specified quality criteria and specifications as specified in WPS	2	3	-	1
PC20. provide appropriate consumables and accessories to welder during cutting process	-	1	-	-
PC21. measure the final workpiece and compare with the dimensions as prescribed in the WPS and engineering drawing	-	1	-	-
Support in post-welding and cutting operations	6	11	-	5

PC22. shut down the equipment and remove the workpiece after completion of welding and cutting activities	-	1	-	-
Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC23. support the MMAW welder in checking the work pieces as per the work instructions for product quality	1	2	-	1
PC24. assist in conducting visual inspection, destructive and non-destructive tests on the work pieces	2	3	-	2
PC25. separate the defective pieces which can be repaired/ reworked and pieces which are beyond repair	1	2	-	1
PC26. clean and store all the tools, machine and equipment after completion of work	1	2	-	1
PC27. dispose scrap or waste material in accordance with the company policies and environmental regulations	1	1	-	-
NOS Total	30	50	-	20

DGT/VSQ/N0101- Employability Skills (30 Hrs)

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Introduction to Employability Skills</i>	1	1	-	-
PC1. understand the significance of employability skills in meeting the job requirements	-	-	-	-
<i>Constitutional values – Citizenship</i>	1	1	-	-
PC2. identify constitutional values, civic rights, duties, personal values and ethics and environmentally sustainable practices	-	-	-	-
<i>Becoming a Professional in the 21st Century</i>	1	3	-	-
PC3. explain 21st Century Skills such as Self- Awareness, Behavior Skills, Positive attitude, self-motivation, problem-solving, creative thinking, time management, social and cultural awareness, emotional awareness, continuous learning mindset etc.	-	-	-	-
<i>Basic English Skills</i>	2	3	-	-
PC4. speak with others using some basic English phrases or sentences	-	-	-	-
<i>Communication Skills</i>	1	1	-	-
PC5. follow good manners while communicating with others	-	-	-	-
PC6. work with others in a team	-	-	-	-

<i>Diversity & Inclusion</i>	1	1	-	-
PC7. communicate and behave appropriately with all genders and PwD	-	-	-	-
PC8. report any issues related to sexual harassment	-	-	-	-
<i>Financial and Legal Literacy</i>	3	4	-	-
PC9. use various financial products and services safely and securely	-	-	-	-

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC10. calculate income, expenses, savings etc.	-	-	-	-
PC11. approach the concerned authorities for any exploitation as per legal rights and laws	-	-	-	-
<i>Essential Digital Skills</i>	4	6	-	-
PC12. operate digital devices and use its features and applications securely and safely	-	-	-	-
PC13. use internet and social media platforms securely and safely	-	-	-	-
<i>Entrepreneurship</i>	3	5	-	-
PC14. identify and assess opportunities for potential business	-	-	-	-

PC15. identify sources for arranging money and associated financial and legal challenges	-	-	-	-
<i>Customer Service</i>	2	2	-	-
PC16. identify different types of customers	-	-	-	-
PC17. identify customer needs and address them appropriately	-	-	-	-
PC18. follow appropriate hygiene and grooming standards	-	-	-	-
<i>Getting ready for apprenticeship & Jobs</i>	1	3	-	-
PC19. create a basic biodata	-	-	-	-
PC20. search for suitable jobs and apply	-	-	-	-
PC21. identify and register apprenticeship opportunities as per requirement	-	-	-	-
NOS Total	20	30	-	-

Assessment Parameters:

Assessment Plan:

1. Components of Assessment:

- Each subject will be assessed in three components: Theory (40% weightage), Practical (40% weightage), and On-job Training (OJT, 20% weightage).

2. Passing Parameters:

- To pass the semester, students must meet both the assessment parameters given below.

Parameter 1 - Weighted Semester Score:

- Students must achieve a minimum of 60% in the weighted average score across all three components (Theory, Practical, and OJT) for each subject.

Parameter 2 - Individual Component Score:

- Students need to score at least 40% in each individual component (Theory, Practical, and OJT) of every subject.

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

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