



QUALIFICATION FILE

Marine Structural Fitter & Fabricator

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

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

NCrF/NSQF Level: 4

Submitted By:

Additional Skill Acquisition Programme (ASAP) Kerala

KINFRA Film and Video Park, Sainik School P. O.

Kazhakkootam, Thiruvananthapuram, Kerala 695585

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Section 1: Basic Details

1.	Qualification Name	Marine Structural Fitter & Fabricator							
2.	Sector/s	Construction							
3.	Type of Qualification: <input checked="" type="checkbox"/> New <input 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)</i> QG-04-CO-00088-2023-V1-ASAP	Qualification Name of existing/previous version: Marine Structural Fitter & Fabricator						
4.	a. OEM Name b. Qualification Name <i>(Wherever applicable)</i>	Marine Structural Fitter & Fabricator							
5.	National Qualification Register (NQR) Code &Version <i>(Will be issued after NSQC approval)</i>	QG-04-CO-00088-2023-V1-ASAP	6. NCrF/NSQF Level: 4						
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	Individuals at this job are responsible for Checking and measuring parts for flaws and other accuracy of fit using gauges, micrometers etc., and removes defects by chipping, filing, scraping, grinding and does other supplementary tooling as necessary. Assembles engines and auxiliary machinery in position using hoisting equipment and other tools. Tests completed assembly and makes necessary adjustments, dismantles partly or completely such machinery in ship as propelling machinery, steam diesel or electric auxiliaries, pumps, cargo-handling machinery anchor-handling gear, ventilating and firefighting equipment, steering gear etc., removes and replaces worn or damaged parts and reassembles them as per drawings under guidance of Marine Engineer using hand and portable tools. Installs below deck auxiliaries such as evaporators, stills, heaters, pumps, condensers and boilers and connects them to steam pipe systems. Tests and inspects installed machinery and equipment during dock and sea trials and removes defects, if any. May attend to minor electrical defects. May assist in keeping watch on engine, boiler and other machinery and assist in their operation.							
9.	Eligibility Criteria for Entry for Student/Trainee/Learner/Employee	a. Entry Qualification & Relevant Experience: <table border="1" style="margin-left: 20px; border-collapse: collapse; width: 100%;"> <thead> <tr> <th style="width: 5%;">No.</th> <th style="width: 60%;">Minimum qualification</th> <th style="width: 35%;">Experience required</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1.</td> <td>Completed ITI* after 10th</td> <td>No Experience required</td> </tr> </tbody> </table>		No.	Minimum qualification	Experience required	1.	Completed ITI* after 10th	No Experience required
No.	Minimum qualification	Experience required							
1.	Completed ITI* after 10th	No Experience required							

		<table border="1"> <tr> <td>2.</td> <td>10th Grade pass</td> <td>2 year relevant experience</td> </tr> </table> <p>*(Welder, Fitter, Sheet Metal Worker, Mechanical)</p> <p>b. Age: 17yrs</p>	2.	10th Grade pass	2 year relevant experience												
2.	10th Grade pass	2 year relevant experience															
10.	Credits Assigned to this Qualification, Subject to Assessment <i>(as per National Credit Framework (NCrF))</i>	22	11. Common Cost Norm Category (I/II/III) <i>(wherever applicable): II</i>														
12.	Any Licensing requirements for Undertaking Training on This Qualification <i>(wherever applicable)</i>	NA															
13.	Training Duration by Modes of Training Delivery <i>(Specify Total Duration as per selected training delivery modes and as per requirement of the qualification)</i>	<input checked="" type="checkbox"/> Offline <input type="checkbox"/> Online <input type="checkbox"/> Blended															
		<table border="1"> <thead> <tr> <th>Training Delivery Modes</th> <th>Theory (Hours)</th> <th>Practical (Hours)</th> <th>OJT Mandator y (Hours)</th> <th>OJT Recommended (Hours)</th> <th>Total (Hours)</th> </tr> </thead> <tbody> <tr> <td>Classroom (offline/online)</td> <td>240</td> <td>420</td> <td></td> <td></td> <td>660</td> </tr> </tbody> </table>				Training Delivery Modes	Theory (Hours)	Practical (Hours)	OJT Mandator y (Hours)	OJT Recommended (Hours)	Total (Hours)	Classroom (offline/online)	240	420			660
Training Delivery Modes	Theory (Hours)	Practical (Hours)	OJT Mandator y (Hours)	OJT Recommended (Hours)	Total (Hours)												
Classroom (offline/online)	240	420			660												
14.	Aligned to NCO/ISCO Code/s <i>(if no code is available mention the same)</i>	7233.220,7233.0500															
15.	Progression path after attaining the qualification <i>(Please show Professional and Academic progression)</i>	Marine Structural Fitter → Workman Grade 2, 1 → Senior Workman Grade 2, 1 → Workman Supervisor Grade 2, 1 → Supervisor Grade 2, 1 → Assistant Engineer, Engineer, Senior Engineer → Manager, Deputy Manager, Senior Manager															
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	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No URLs of similar Qualifications:															
18.	Is the Job Role Amendable 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	ASAP Kerala offers courses in a gender neutral manner, ensuring egalitarian mobilization of students and providing equal opportunities for all.															

20.	Are Greening/ Environment Sustainability Aspects Covered <i>(Specify the NOS/Module which covers it)</i>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
21.	Is Qualification Suitable to be Offered in Schools/Colleges	Schools <input checked="" 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 <i>(In case of CS or MS, provide details of both Lead AB & Supporting ABs)</i>	Name: Dr. Usha Titus IAS (Retd), CMD, ASAP Kerala Email: nsqf@asapkerala.gov.in / curriculum@asapkerala.gov.in Contact No.: 8281634924 Website: www.asapkerala.gov.in	
23.	Final Approval Date by NSQC: 05-01-2023	24. Validity Duration: 3 years	25. Next Review Date:05-01-2026

Section 2: Module Summary

NOS/s of Qualifications

(In exceptional cases these could be described as components)

Mandatory NOS/s:

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

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

S. No	NOS/Module Name	NOS/Module Code & Version (if applicable)	Core/ Non-Core	NCrF/ NSQF Level	Credits as per NCrF	Training Duration (Hours)					Assessment Marks					
						Th .	Pr.	OJ T- Ma n.	OJT- Rec.	Total	Th.	Pr.	Proj. + Viva	Total	Weightage (%) (if applicable)	
1.	Introduction to marine industry and professional skills	-	Core	4	2	45	15	-	-	60	1.5	3	0.5	-	5	NA
2.	Safety and Procedure	-	Core	4	1	15	15	-	-	30	1.5	3	0.5	-	5	NA
3.	Tools and Machineries for fitter and testing	-	Core	4	4	33	87	-	-	120	9.37	18.75	3.125	-	31.25	NA
4.	Joining Operations	-	Core	4	5	30	120	-	150	60	9.37	18.75	3.125	-	31.25	NA
5.	Ship Building Materials and Process	-	Core	4	6	48	132	-	180	60	11.25	22.5	3.75	-	37.5	NA
6.	Basic awareness to Software	-	Core	4	1	17	13	-	30	60	1.5	3	0.5	-	5	NA
7.	Structural Fitting and Machinery Outfit	-	Core	4	2	22	38	-	60	60	3	6	1	-	10	
8.	Employability Skills		Non-Core		1	30				30						
Duration (in Hours) / Total Marks										660					125	

Assessment - Minimum Qualifying Percentage

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

Minimum Pass Percentage – Aggregate at qualification level: 50% (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)	<p><i>Educational Qualification: Minimum Bachelor's degree in Marine Engineering, Shipbuilding Technology, or Mechanical Engineering with 3 years’ experience in related field.</i> <i>Training experience: At least 1-2 years of experience as a trainer or mentor in technical skills related to marine fabrication.</i> Or</p> <p><i>Minimum Diploma in Mechanical Engineering, Marine Engineering, or a related discipline with 5 years’ experience in related field.</i> <i>Training experience: At least 2-3 years of experience as a trainer or mentor in technical skills related to marine fabrication.</i></p> <p>Certification: “Trainer” mapped to the Qualification Pack “MEP/Q2601, V2.0” Minimum accepted score is 80% aggregate.</p>
2.	Master Trainer’s Qualification and experience in the relevant sector (in years) (as per NCVET guidelines)	<p><i>Educational Qualification: Minimum Bachelor's degree in Marine Engineering, Shipbuilding Technology, or Mechanical Engineering with 5 years’ experience in related field.</i> <i>Training experience: At least 3-4 years of experience as a trainer or mentor in technical skills related to marine fabrication.</i> Or</p> <p><i>Minimum Diploma in Mechanical Engineering, Marine Engineering, or a related discipline with 7 years’ experience in related field.</i> <i>Training experience: At least 4-5 years of experience as a trainer or mentor in technical skills related to marine fabrication.</i></p> <p>Certification: “Trainer” mapped to the Qualification Pack “MEP/Q2601, V2.0” Minimum accepted score is 80% aggregate.</p>
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

1.	Assessor’s Qualification and experience in relevant sector (in years) (as per NCVET guidelines)	<p><i>Educational Qualification: Minimum Bachelor's degree in Marine Engineering, Shipbuilding Technology, or Mechanical Engineering with 7 years’ experience in related field.</i></p> <p><i>Training experience: At least 5-6 years of experience as a trainer or mentor in technical skills related to marine fabrication.</i></p> <p><i>Or</i></p> <p><i>Minimum Diploma in Mechanical Engineering, Marine Engineering, or a related discipline with 9 years’ experience in related field.</i></p> <p><i>Training experience: At least 6-7 years of experience as a trainer or mentor in technical skills related to marine fabrication.</i></p> <p><i>Certification: “Trainer” mapped to the Qualification Pack “MEP/Q2601, V2.0” Minimum accepted score is 80% aggregate.</i></p>
2.	Proctor’s Qualification and experience in relevant sector (in years) (as per NCVET guidelines)	NA
3.	Lead Assessor’s/Proctor’s Qualification and experience in relevant sector (in years) (as per NCVET guidelines)	NA
4.	Assessment Mode (Specify the assessment mode)	Offline assessment
5.	Tools and Equipment Required for Assessment	<input checked="" type="checkbox"/> Same as for training <input type="checkbox"/> Yes <input type="checkbox"/> No (details to be provided in Annexure-if it is different for Assessment)

Section 5: Evidence of the need for the Qualification

Provide Annexure/Supporting documents name.

1.	Latest Skill Gap Study (not older than 2 years) (Yes/No): Yes
2.	Latest Market Research Reports or any other source (not older than 2 years) (Yes/No): Yes
3.	Government /Industry initiatives/ requirement (Yes/No): Yes
4.	Number of Industry validation provided: 22
5.	Estimated nos. of persons to be trained and employed: 250 +
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>Annexure added</i>
2.	Annexure: List of tools and equipment relevant for qualification (<i>Mandatory, except in case of online course</i>)	<i>Annexure added</i>
3.	Annexure: Detailed Assessment Criteria (<i>Mandatory</i>)	<i>Annexure added</i>
4.	Annexure: Assessment Strategy (<i>Mandatory</i>)	<i>Annexure added</i>
5.	Annexure: Blended Learning (<i>Mandatory, in case selected Mode of delivery is “Blended Learning”</i>)	<i>Not Applicable</i>
6.	Annexure: Multiple Entry-Exit Details (<i>Mandatory, in case qualification has multiple Entry-Exit</i>)	<i>Not Applicable</i>
7.	Annexure: Acronym and Glossary (<i>Optional</i>)	<i>Annexure added</i>
8.	Supporting Document: Model Curriculum (<i>Mandatory – Public view</i>)	<i>Supporting document added</i>
9.	Supporting Document: Career Progression (<i>Mandatory - Public view</i>)	<i>Supporting document added</i>
10.	Supporting Document: Occupational Map (<i>Mandatory</i>)	<i>Supporting document added</i>
11.	Supporting Document: Assessment SOP (<i>Mandatory</i>)	<i>Supporting document added</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	Job that requires well developed skill, with clear choice of procedures in familiar context.	Process flow of a ship building, safety and effective work procedures will be handled.	4
Professional and Technical Skills/ Expertise/ Professional Knowledge	Knowledge of facts, principles, processes and general concepts, in a field of work or study	The course handles all the areas related to Ship structure building. From reading the drawing, marking and cutting of plates, welding, outfitting, etc.	4
Employment Readiness & Entrepreneurship Skills & Mind-set/Professional Skill	A range of cognitive and practical skills required to accomplish tasks and solve problems by selecting and applying basic methods, tools, materials and information.	Personal, professional skills are handled in the course. Idea about all fields from designing, implementation, testing, etc. are provided.	4
Broad Learning Outcomes/Core Skill	Desired mathematical skill; understanding of social, political; and some skill of collecting and organizing information, communication.	The course will deal with all the areas involved in a marine structural fitting. Other than that the course deals with core skills in detail such as Welding, fitting.	4
Responsibility	Responsibility for own work and learning and some responsibility for others' works and learning.	Organization structure, safety, professional skills and organizational skills will be delivered in the session.	4

Annexure: Tools and Equipment (Lab Set-Up)

List of Tools and Equipment

Batch Size: 30

Sl No	Tool/Equipment Name	Specification	Quantity
1	Cutting tools		
2	Measuring tools		
3	Precision tools		
4	Marking tools		
5	Assembling and Dismantling tools		
6	Riveting Machine		
7	CO2 Welding Machine		
8	Metal Arc Welding Machine		
9	Gas Welding Machine		
10	TIG Welding & MIG Welding Machine		

11	Spot Welding/TACK Welding		
12	FCA Welding Machine		
13	Brazing Equipment		
14	Gases used for cutting – LPG, Acetylene, Oxygen, CNG. Plasma etc.		
15	CAD Software		

Classroom Aids

The aids required to conduct sessions in the classroom are:

1. Projector
2. Laptops/Computer

Annexure: Industry Validations Summary

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

S. No	Organization Name	Representative Name	Designation	Contact Address	Contact Phone No	E-mail ID
1.	Penta Marine Engineering,	Sijil George	Contractor Representative	Kannatt House , House no:26/81A, Thevara, Ernakulam-13	9961986124	pentamarineengg@gmail.com
2.	Poseidon Marine Engineers	Lijon K.V	Operation Manager	2nd Floor, Pallath Business Centre, Kurishupally Rd, near ICICI Bank, Atlantis, Ravipuram, Branch, Kochi, Ernakulam, Kerala 682015	9744489437	psdn@poseidonmarineengineers.com
3.	Anu Industries	Nibin Mathew	Supervisor	Padivattom, Edappally, Kochi-24	9496464398	anuindustries.csl@gmail.com
4.	Asian Marine Contractors	Alwin Johnson	Representative	Vazhachal, Karukutty P.O, Ernakulam, Kerala 683576	8075842210	joyasianmarine@gmail.com
5.	PVM Marine Engineering	Muhammed Shafi. T.E	Representative	PVM Plaza, Everest Junction, Market P.O, Muvattupuzha, Cochin-686673	9605112253	shafite786@gmail.com
6.	Horizon Services	Binu A.N	Works Manager	174, D.D Vyapar Bhavan,	9605093655	horizonservices97@gmail.com

				K.P Vallon Road, Kadavanthra, Kerala-682020		
7.	Zain Engineers & Technologies Consultants Pvt Ltd	Jostine.K.Francis	Supervisor	House No 28/2417B, Kachappilly Lane, Chilavanoor Rd, Kadavanthra, Ernakulam, Kerala-682020	8156867997	zainengg@rediffmail.com
8.	Insalmech Marine & Mech Engineering	Hareesh.P.Babu	Representatve	Manthureethal Building, 2/81, 1st Floor, Amballoor P.O, Ernakulam, Kerala-682315	9656662556	hareeshpbabu@insalmech.co.in
9.	Ocean Dreams Marine Services	Arvind. S	Representative	Ottathengil Building, EramathoorP.O, Mannar, Alappuzha	9048122887	operation@oceandream.in
10.	ARC & Fusion India Pvt Ltd	Rajesh Kumar N.C	Director	PAP-C-38-39, MIDC, ITC Industrial Area Pawane, Navi Mumbai, Maharashtra	9947444187	rajesh@arcandfusion.com
11.	St. Joseph Engineering Works	Peter.P.J	Proprietor	CC 13/1085, Tagor Road, Cochin-05	9961657561	jason7561peter@yahoo.com
12.	TED Marine Engineering	Lijumon A.K	Contractor	Office no.CC39/6176(c)1, Kurishupally Road , Ravipuram, Kochi-15	9847527020	lijuak1980@gmail.com

13.	Tile Marine	Anilkumar K.K	Manager	XVIII/47A, Near Mini Muthoot Finance, I.N.T.U.C Road, Nettoor, Ernakulam, Kerala-682040	9995280212	cochin@tilemarine.in
14.	Total Marine Technology	Sunil T.S	Managing Partner	19/1432, Thundiparambil building, Palluruthy, Cochin-682006	9567396545	sunil@totalmarinetechology.net
15.	V.J Jacob Engineering Contractors	V.J Jacob	Proprietor	61/803-B, Sivagdha, R.MadhavaNair Road, Ravipuram, Cochin-16	9847211747	vjjacob30@gmail.com
16.	Evergreen Marine Service	Jojo P.C	Proprietor	Potteparambil(H), Mala, Kuzhur P.O, Thrissur-680734	9645809264	jojop2009@gmail.com
17.	JP Marine Services	Manoj Mampilly	Proprietor	5/65A, Mampilly, Vadel Church Road, Naprambalam Ernakulam-682509	9847281268	jpmarineservices@gmail.com
18.	K Mohammed & Sons	Asad Muhammed	Contractor	Kalathil House, Thazhupu, Parayakad P.O, Cherthala-688540	9895390209	asadkalathil@gmail.com
19.	Baby Engineers	Sabu C.A	Partner	Door no:37/1724-A, Kumaranasan Road, Kadavanthra P.O, Kochi-682020	9846182384	baby.engrs@gmail.com

20.	Sterling Marine Services	Rajeevan M.F	Managing Partner	999/B, Kottaram Lane, Vaduthala-682023	9895839479	rajeevanfrancise2007@yahoo.co.in
21.	Ashtami Engineering	Akhil A.R	Manager	XX/540B, Karikkulam Building, Marekad Road, Ashtamichira P.O, Thrissur-680731	9447396815	ashtamiengineering@gmail.com
22.	Triple Yes Contractors	Joseph Jayan	Proprietor	Attippetty, S.Puthuvype, Puthuvype P.O, Kerala-682008	9288005086	josephtrippleyes@yahoo.co.in

Annexure: Training & Employment Details

Training and Employment Projections:

Year	Total Candidates		Women	
	Estimated Training #	Estimated Employment Opportunities	Estimated Training #	Estimated Employment Opportunities
2024-25	250+	250+	250+	250+
2025-26	250+	250+	250+	250+
2026-27	250+	250+	250+	250+

Data to be provided year-wise for next 3 years

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
ASP/CON/N0101: Introduction to marine industry and professional skills	<ul style="list-style-type: none"> • Recognize about importance of Marine Structural fitter job role.. • Proficiency in identifying basics of ship design, structural drawings. • To be familiar with marine terminologies. • Familiarize general ship building process • Understand Class rules, regulatory mechanisms. 	2	3	--	--
	Total Marks	5			
ASP/CON/N0102: Safety and Procedure	<ul style="list-style-type: none"> • Recognize and comply Safe Working Practice • Illustrate Survival Technique following safety precautions. 	2	3	--	--
	Total Marks	5			
ASP/CON/N0103: Tools and Machineries for fitter and testing	<ul style="list-style-type: none"> • Work organization to make job as per specification applying different types of basic fitting operation and Check dimensions. accuracy. (Basic fitting operation – marking, Hacksawing, Chiseling, Filing, Drilling, Taping, Turning and Grinding, Milling, Lifting, etc.) Route optimization and planning using software tools. • Understand the use of measuring tools/precision tools. • Turning operations like plain turning, step turning, facing taper turning (Internal and External) threading, hole turning, Boring etc. • Operations in sheet metal to required shape and size by bending, seaming, firming, riveting, wiring. Various operations such as shearing, bending, beading, channeling, circle cutting. 	9	19	--	3

	Making ducts cabins and panels. Gas cutting, gauging , edge preparation by using oxy- acetylene flame				
Total Marks		31			
ASP/CON/N0104: Joining Operations	<ul style="list-style-type: none"> • Demonstrate different joining operations observing standard procedure. • Practice on sheet metal seams. • Perform brazing operations on sheet metal. • Perform Cutting operations like Gas cutting, Mechanical cutting, Plasma cutting, Jigsaw cutting, etc. • Perform CO2 Welding, Metal Arc welding, Gas welding, TIG welding & MIG welding and spot welding/TACK welding, FCA Welding on sheet metal plates. • Make sheet metal articles according to drawing or sample following safety precaution. • Plan & work in different sheet metals such as tin, copper, brass. • Undertake Aluminum frame works. • Make ducts, cabins & panels. • Perform Pipe welding operations like edge preparation, cutting, fit up, bending, welding, checking etc. 	9	19	--	3
Total Marks		31			
ASP/CON/N0105: Ship Building Materials and process	<ul style="list-style-type: none"> • Understand the properties of different materials used for ship structure building. • Understand the structural members of ship building. • Understand the defects and quality of the plate surface. • Understand the preservation methods of marine structure. • Understand marking of plates and profiles. (Manual marking of plates using sketches, Manual marking of profiles using stiffener list and sketches) • Understand cutting of plates and profiles. (Plate cutting using machine/ manual method, Profile cutting using machine/ 	11	23	4	--

	manual method, Gases used for cutting – LPG, Acetylene, Oxygen, CNG, Plasma etc.) <ul style="list-style-type: none"> • Understand forming of plates and profiles. (Forming of plates and profiles using mechanical press, Types of bending – Cold bending, Line/spot heating) • Understand Fabrication (Familiarization of production drawings, Fit- up Technique, Welding) 				
Total Marks		38			
ASP/CON/N0106: Basic awareness to Software	<ul style="list-style-type: none"> • Understand Software used for ship designing and learn basics of designing. • Understand DWG reading and Nesting. 	2	3		
Total Marks		5			
ASP/CON/N0107: Structural Fitting and Machinery Outfit	<ul style="list-style-type: none"> • Understand different structural fitting acts. • Understand installation of different systems in ship building, • Understand and doing different hull symbols and ship symbols. • Understand the role of Structural fitter in VLCC. 	3	6	--	1
Total Marks		10			
Grand Total : 125					

Annexure: Assessment Strategy

This section includes the processes involved in identifying, gathering and interpreting information to evaluate the learner on the required competencies of the program. This section outlines the processes for identifying, gathering and interpreting information to evaluate learners against the required competencies of the program. The assessment strategy is designed to ensure assessments are valid, reliable, fair and aligning with the National Skills Qualifications Framework (NSQF).

Assessment Framework

ASAP employs a structured assessment framework that assigns weightage to various activities throughout the training program. The components of assessment include Attendance, Assignments, Internal/Continuous Assessments, Project and Final Assessments, with Attendance and Internal Assessments falling under Continuous and Comprehensive Evaluation (CCE). All assessments will reflect as marks, culminating in an overall grade indicated on the report card or certificate.

Type of Assessment		Weightage	
Continuous & Comprehensive Evaluation	Attendance	10%	
	Students Involvement	Assignment	10%
		Internal Exam	10%
Practical/ Lab Work/ Apprenticeship/ Hands on Experience by the Industry		30%	
Skill Proficiency Test By the Industry/Assessment Agency		40%	
Total		100%	

Attendance Criteria

Skill based sessions and training are delivered through lectures, discussions, demonstrations, and experiments ensuring student participation during daily learning activities. So those who miss such sessions will not be able to compensate for the loss. Regular student participation in daily classroom activities plays a significant role in student’s success. For each course and batch, the student’s attendance will be marked daily, and marks will be awarded based on the following Table on course

completion and final assessment. Students whose attendance fall below 70% will not be eligible for final assessment and course completion certificate.

Attendance and Mark Distribution	
Attendance Percentage	Marks
Above 90%	10
86 to 90%	8
80 to 85%	5
Below 80% (Permissible only in the event of condonation)	3

Internal/Continuous Assessment & Student Involvement

A Continuous and Comprehensive Evaluation (CCE) shall be done for candidates for the assignments and internal assessments. The outcome-based assessment followed by the Assessment Division for the courses offered will conduct the Knowledge and Application level tests at least four times during a skill course as Assignments and Internal/Continuous Assessments.

Assignments (Theory & practical)

Students can complete assignments according to his/her preferred approach. This might involve reading technical study materials, chapters and assigned reading materials to gain a better understanding prior to completing an assignment or exploring new resources to gain additional information. There shall be no restriction on the resources that the students are allowed to consult or any limit to the number of hours he/she choose to spend on the assignment. Since each student employs his/her own personal learning style, an individual assignment may actually be a fairer measure of the student's learning.

Students have to complete two assignments, the first after coverage of 25% of the total syllabus and the second assignment after the coverage of 75% of the total syllabus. Both assignments shall be evaluated and assigned a score. The scores should be marked on the student's assignment sheets by the Trainer after evaluation. The scores shall be entered in the student profile twice. The first shall be made on completion of 25% of the initial part of the syllabus and the second entry shall be made on completion of 75% of the syllabus.

Internal/Continuous Assessment (Theory & practical)

There are two internal tests, one after completing 50% of the syllabus and the other at the end of the training/course. These tests are conducted by the trainer based on the topics covered in the course. Questions are selected at random from the question bank already generated. Of these, for each test, 60% of the questions are theoretical and in the form of objective type and the rest 40% will be descriptive questions which will be oriented towards procedure/strategies/ways of doing/ ethics of doing etc. The duration of the first test after 50% of the total coverage is 1 hr and the second test after completion of the total syllabus is 3hrs. The duration is so fixed to ensure coverage of the total learning events before the final assessments. The marks/grades shall be entered in the student's profile twice. The first entry shall be made on completion of the 50% of the initial syllabus and the second entry shall be made on completion of the rest of the syllabus.

Course Final/End Assessment

The performance-based Final/End Assessment include the following and the assessment will be conducted by the Assessment division of ASAP Kerala.

- a) Practical test/Hands on experience/Skill test in an OJT Centre or Skill Development Centre
- b) Project Presentation and Viva voce
- c) Final Assessment with MCQ and Descriptive questions.

Responsibility of Assessment Division of ASAP Kerala

Final assessment will be conducted by ASAP Kerala. The questions will be generated randomly from the question bank. The Assessment Division of ASAP Kerala will coordinate the assessment process with the Cluster, Training and Curriculum Division.

The Assessment Division with support of the Curriculum Division and Cluster will prepare the Question Bank. The Question Bank is prepared at the time of initial course creation by Subject Matter Experts identified by Curriculum division in consultation with respective Cluster. For courses already created the question banks are prepared by the Assessment Division, Cluster and Curriculum Division in consultation with the Training Division. The Question Bank will be used to prepare the question paper for the final assessment. The assessment division shall conduct the assessment through the assessors. The assessment shall be monitored by the assessors on the assessment platform. The final answer sheets shall be evaluated by experts in the field and the final scores with grades shall be shared by assessment division to the certification division for final certificate issue.

Randomly selected questions from the Question bank developed will be used for Final Assessments. 20% of questions will be replaced with new ones every year and a blue print that elaborates weightage to QP/NOS, degree of difficulty and application type questions will be used for the assessment. This will be done by a committee formed from members of cluster, training, curriculum and assessment division.

A Question Bank will be developed by experts following prescribed norms. Selected questions will be enlisted in the bank. The Question Bank will have 6 times the requirement of questions for the first year to start with and thereafter 20% questions will be replaced every year with new ones in each category with the help of experts

following the same procedures to ensure relevance and variety. Each batch will have a unique user id and the trainer will be given access to the Question Bank once for each category of the test. They will be given access to the test only at the prescribed hour on the day of assessment. Question paper will be generated from the Question Bank at random following the criteria specified for assessing each competency given in the session assessment evidence. Guidelines will be given to the trainers in terms of evaluation of assignments and internal tests.

Final Score and Grading Scheme

1. Assessment System Overview

- Assessment division of ASAP Kerala shall be responsible for conducting the assessment.
- Question bank shall be prepared in advance by the division.
- Assessments shall be conducted at ASAP Community skill parks/Accredited training centres/Colleges/AI proctored assessment platform.

2. Testing Environment

- Assessments shall be conducted at ASAP community skill parks/Accredited training centres/Colleges or through AI proctored assessment platform.

3. Assessment Quality assurance levels/framework

- Questions papers are created and finalised by subject matter experts considering the level and assessment criteria.

4. Types of Evidence or evidence gathering protocol

- ID Card details of students shall be checked before entering the examination centre.

5. Method of Verification or validation

- ID Card details of students, face verification through the online platform

6. Method for assessment documentation, archiving and access.

- Answer papers and attendance sheets shall be collected by the manager of the centre/faculties at colleges and shall be handed over to the assessment division in case of offline assessments.

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