



Maldives National Skills Development Authority



# National Competency Standard for Marine Mechanic

Standard Code: TRA-01L3-V3-24

Qualification Name: National Certificate III in Marine Mechanic

## FOREWORD

The pivotal role of the Maldives National Skills Development Authority (MNSDA) in meticulously implementing and expanding Technical and Vocational Education & Training (TVET) exemplifies the steadfast commitment of the Maldives to build a skilled and resilient workforce. This commitment is evident from the strategic formulation of National Standards and the establishment of a comprehensive framework for training and certification.

Under the Higher Education and Training Act 7/2021, the MNSDA assumes an instrumental role, reflecting the government's unwavering dedication to streamlining TVET policies and procedures. This includes the establishment of a robust system for accrediting and registering both Institution Based Training (IBT) and Employer Based Training (EBT) providers. The MNSDA's active involvement in conducting the National Apprenticeship Program (NAP), National Trade Testing and Certification (NTTC), and the issuance of National Certificates reflects a comprehensive approach to ensure elevated quality standards and competency within the workforce.

The National Competency Standards (NCS) revised through the Maldives Enhancing Employability and Resilience of Youth (MEERY) project accentuates the commitment to updating and sustaining contemporary skill sets aligned precisely with industry demands. Deliberate efforts to revise existing NCS, coupled with the development of curriculum, teaching materials, resource books, and logbooks, attest to our dedication to ensuring the ongoing relevance and currency of the TVET system in the Maldives.

The active engagement of Technical Panels and Employment Sector Councils in the NCS development and approval process, coupled with alignment to the Maldives National Qualification Framework (MNQF) and accreditation by the Maldives Qualifications Authority (MQA), certifies that the TVET system not only remains highly responsive but also ensures the quality standards demanded by industries. This approach enables the system to effectively meet the diverse needs of industries and adapt to the evolving economic landscape.

The collaborative development of the National Certificate IV in Marine Mechanic by the MNSDA, MEERY, and the Maldives Institute of Technology exemplifies the practical implementation of TVET initiatives. This training package represents a critical stride towards addressing the requisite skills while fostering opportunities to integrate sustainable economic development within the TVET framework.



Dr. Zahra Mohamed

Chief Executive Officer

Maldives National Skills Development Authority

**EMPLOYMENT SECTOR COUNCILS**

#	Name	Designation	Organisation
01	Ahmed Shameem	Director General	Ministry of Transport and Civil Aviation
02	Mohamed Jamshad	Colonel	Maldives National Defence Force
03	Ahmed Shujau	Chief Inspector of Police	Maldives Police Services
04	Aishath Neesha Khaleel	General Manager	Maldives Ports Limited
05	Mohamed Zaid	Head of Center for Maritime Studies	MNU / Maritime Center
06	Asiyath Haneef	Training Manager at Maldivian	Maldivian
07	Ahmed Shahid	Maritime Expert	-
08	Ismail Fariq	Chief Sales Officer	Maldives Transport and Construction Company
09	Fathimath Haula	Programme Officer	Maldives National Skills Development Authority

**National Occupational Standard has been endorsed by:**



Aishath Neesha Khaleel  
Chair person  
Transport Sector Council

Maldives National Skills Development Authority  
Umar Zahir Office Building, 5th Floor,  
OrchidMaa Hingun, Hulhumale', Republic of Maldives.

Date of Endorsement: 25.10.2023

**TECHNICAL SUPPORT**

#	Name	Designation	Organisation
01			
02			

<b>TECHNICAL PANEL MEMBERS</b>			
<b>#</b>	<b>Name</b>	<b>Designation</b>	<b>Organisation</b>
01	Ahmed Zubair Adam	Executive Board Member	National Boats Association of Maldives
02	Ismail Zameel	Director	Maldives Airports Company Limited
03	Rilwan Mohamed	Lecturer	Maldives Polytechnic
04	Ahmed Abdul Rahman	Subinspector of Police	Maldives Police Services
05	Nahiz Ahmed	Marine Engineer	MTCC

<b>VERSION</b>	<b>DEVELOPER</b>	<b>DATE</b>	<b>STANDARD CODE</b>
V3	Maldives Institute of Technology	30.08.2023	TRA-01L3-V3-24

## Standard Review Process

---

To begin with, marine mechanic occupation competencies were profiled through study of the occupations across the Maldivian workplaces aligned to the principles of "Functional Analysis", a methodology used for reviewing Competency Standards. Referred occupational profiling process compared existing competency units incorporated within the National Competency Standard of Level III in Marine Mechanic program.

Draft Review of the occupational standard is then compiled and submitted to the Technical Panel (TP) organised by the Maldives National Skills Development Authority (MNSDA). The Draft Standard is then edited based on comments from TP members under the direct observation of MNSDA. With series of reviewing and editings, TP approved standard is then tabled at Employment Sector Council (ESC) meeting for endorsement.

All the Standards of MNSDA are endorsed from the ESC before being published on its website.

## Description of “Marine Mechanic”

---

Marine Mechanic is designed to equip individuals with essential competencies necessary for effective marine mechanical maintenance. Participants will gain practical insights into fundamental techniques and practices, emphasising the importance of diagnosing, repairing, and maintaining marine engines and systems.

The certification serves as an entry point for individuals entering the field of marine mechanics in the Maldives, offering a solid foundation in the basic skills required for contributing to the maintenance and operation of marine equipment and vessels.

## Recommended changes to the existing National Certificate III in Marine Mechanic

---

With recommendations from the Technical Panel and ESC, following changes have been brought to this National Certificate III in Marine Mechanic Standard.

1. *Common competencies are included in the revised competency Standard (CS) to strengthen development of soft skills among the participants.*
2. *Special competency unit on Workshop Practice is incorporated to develop knowledge and skills on general workshop competencies prior to attending marine engine related competencies.*
3. *Competency unit on plumbing across the maritime vessels were included first time with the ongoing review and revision.*
4. *Development of competencies on repair and maintenance of marine electronics and navigation systems were felt important and an additional unit is integrated in to the reviewed CS.*

## Job opportunities upon completion of “National Certificate III Marine Mechanic”

---

Upon successful completion of the National certificate III in Marine Mechanic, students can work in the following jobs.

1. *Assistant Marine Mechanic*
2. *Assistant Engine Mechanic*
3. *Engine Operator onboard of a maritime vessel*

## KEY FOR CODING

### Coding Competency Standards and Related Materials

DESCRIPTION	REPRESENTED BY
Industry Sector as per ESC (Three letters)	Construction Sector (CON) Fisheries and Agriculture (FNA) Information, Communication and Technology (ICT) Transport Sector (TRN) Tourism Sector (TOU) Social Sector (SOC) Foundation (FOU)
Standard Number - Occupation with in an industry sector	Two digits 01-99
Common Competency	CM
Core Competency	CC
Unit Number - Occupation with in a Standard	Three digits 01-99
MNQF level of qualification	L1, L2, L3, L4 etc.
Version Number	V1, V2 etc.
Separator	-
Year of Last Review of standard, qualification	Two digits responding to the year of last review, example 23 for the year 2023
Qualification Code	Refers to Standard code in cover page

## 1. Endorsement Application for Qualification 01

### 2. NATIONAL CERTIFICATE III IN MARINE MECHANIC

**3. Qualification code: TRA-01L3-V3-24**

**Total Number of Credits: 58**

#### 4. Purpose of the qualification

The holders of this qualification will be will be competent to work in the Maritime Sector as an Assistant Mechanic. The level one qualification presented here will facilitate preparing students to the entry-level workplace tasks and the competency units are mapped in such a way to fulfil the knowledge and skills requirements of the “Assistant Mechanic” occupation within the local Maritime Industry. Referred mechanics can undertake general functional assessment of the small/medium marine engines and its systems and perform necessary repair and maintenance tasks.

#### 5. Regulations for the qualification

National Certificate III in the Marine Mechanic Qualification will be awarded to those who are competent in units 1+2+3+4+5+6+7+8+9+10+11+12+13+14+15

#### 6. Schedule of Units

Unit No.	Unit Title	Code
<b>Common Competencies</b>		
01	Apply occupational health and safety requirements	TRA-01-CM01-V3-24
02	Apply work ethics and optimise professionalism	TRA-01-CM02-V3-24
03	Practice effective workplace communication	TRA-01-CM03-V3-24
04	Provide effective customer care	TRA-01-CM04-V3-24
05	Perform computer operations	TRA-01-CM05-V3-24
06	Respond to emergency situations	TRA-01-CM06-V3-24
<b>Core Competencies</b>		
07	Apply science and engineering measurements	TRA-01-CC01-V3-24
08	Perform workshop practice	TRA-01-CC02-V3-24
09	Perform engine top overhaul	TRA-01-CC03-V3-24
10	Maintain and repair marine electrical systems	TRA-01-CC04-V3-24
11	Maintain and repair marine propulsion systems	TRA-01-CC05-V3-24
12	Maintain and repair hull and deck systems	TRA-01-CC06-V3-24
13	Maintain and repair marine plumbing, HVAC systems	TRA-01-CC07-V3-24
14	Maintain and repair marine electronics and navigation systems	TRA-01-CC08-V3-24
15	Perform marine safety and emergency procedures	TRA-01-CC09-V3-24

<b>7. Accreditation requirements:</b>	<ul style="list-style-type: none"> <li>• The training provider should have a workshop or similar training facility to provide the trainees the hands-on experience related to this qualification</li> </ul>
<b>8. Recommended sequencing of units</b>	As appearing under the section 06



## Unit Details

Unit No.	Unit Title	Code	Level	No. of credits	Credit hours	Contact hours
01	Apply occupational health and safety requirements	TRA-01-CM01-V3-24	III	04	40	20
02	Apply work ethics and optimise professionalism	TRA-01-CM02-V3-24	III	03	30	15
03	Practice effective workplace communication	TRA-01-CM03-V3-24	III	03	30	15
04	Provide effective customer care	TRA-01-CM04-V3-24	III	05	50	25
05	Perform computer operations	TRA-01-CM05-V3-24	III	03	30	15
06	Respond to emergency situations	TRA-01-CM06-V3-24	III	05	50	25
07	Apply science and engineering measurements	TRA-01-CC01-V3-24	III	04	40	20
08	Perform workshop practice	TRA-01-CC02-V3-24	III	03	30	15
09	Perform engine top overhaul	TRA-01-CC03-V3-24	III	04	40	20
10	Maintain and repair marine electrical systems	TRA-01-CC04-V3-24	III	04	40	20
11	Maintain and repair marine propulsion systems	TRA-01-CC05-V3-24	III	04	40	20
12	Maintain and repair hull and deck systems	TRA-01-CC06-V3-24	III	04	40	20
13	Maintain and repair marine plumbing, HVAC systems	TRA-01-CC07-V3-24	III	04	40	20
14	Maintain and repair marine electronics and navigation systems	TRA-01-CC08-V3-24	III	04	40	20
15	Perform marine safety and emergency procedures	TRA-01-CC09-V3-24	III	04	40	20
Total				58	580	290

### Packaging of National Qualifications:

National certificate III in Marine Mechanic will be awarded to those who are competent in units 1+2+3+4+5+6+7+8+9+10+11+12+13+14+15

Qualification Code: TRA-01L3-V3-24

## COMPETENCY BASED ASSESSMENT

The final assessment of the National Competency-Based Programmes conducted by the Maldives National Skills Development Authority (MNSDA) is a competency-based assessment.

The Competency-Based Assessment ensures that the students' performance meets the requirements specified in the National Competency Standards (NCS). This assessment approach is designed to verify that graduates are job-ready and meet established occupational competency requirements within their respective fields.

### Eligibility for Final Assessment

To be eligible for the final Competency-Based Assessment, students must fulfil the following conditions:

- achieve a **minimum of 80%** attendance
- deemed competent in each of the units of the programme in the pre-assessment

### Competency-Based Assessment Process

Upon submission of the Pre-assessment report by the training provider, MNSDA will check for all the necessary supporting documents and conduct Competency-Based Assessment through a National Assessor registered with MNSDA. It is important to note that any trainer involved in the training process is **not permitted** to conduct the assessment to maintain impartiality and integrity of the process.

The final Competency-Based Assessment conducted by MNSDA includes both:

- **Theory:** Evaluating students' knowledge and understanding of key theoretical aspects of the competency.
- **Practical:** Assessing hands-on skills and application of knowledge in real-world or simulated environments.

Once the assessment is completed, the National Assessor will send the Competency-Based Assessment Report to MNSDA.

### Competency Status Requirement

For certification to be granted, the student must be officially declared "**Competent**" in each of the units of the programme by the National Assessor.

### Conclusion

Competency-Based Assessment is a critical component in ensuring the quality and credibility of technical and vocational skills-based training. By adhering to the outlined procedure, MNSDA upholds the standards required to certify students who are fully prepared to meet industry demands.