



Maldives National Skills Development Authority



National Competency Standard for Heavy Vehicle Maintenance

Standard Code: TRA-07L3-V1-25

Qualification Name: National Certificate III in Heavy Vehicle Maintenance

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 III in Heavy Vehicle Maintenance 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: 22/01/2025

TECHNICAL SUPPORT

#	Name	Designation	Organisation
01			
02			

TECHNICAL PANEL MEMBERS			
#	Name	Designation	Organisation
01	Surahabeel Waheed	Deputy Chief Technical Officer	Maldives Ports Limited
02	Ali Rameez	General Manager	Maldives Airports Company
03	Mohamed Ibraz Najeeb	Engineering Manager	State Trading Organisation

VERSION	DEVELOPER	DATE	STANDARD CODE
V1	Maldives Institute of Technology	14/07/2024	TRA-07L3-V1-25

Standard Development Process

The development of the “National Certificate III in Heavy Vehicle Maintenance” Standard involved a comprehensive study of transportation occupations in Maldivian workplaces, with a focus on marine enterprises. Job descriptions and international occupational trends were analysed to draft an initial Occupational Standard. This draft will undergo further refinement through a Technical Panel (TP) from Maldivian workplaces, ensuring incorporation of competencies and edits. The TP will provide technical input, suggesting changes to the standard, until a final draft is agreed upon. The approved Final Draft will then be submitted to the Construction Employment Sector Council for endorsement and validation. A brief report detailing the compilation process will accompany the Standard for the Council's review, and any recommended changes will be addressed before final endorsement.

With the endorsement from the Construction Employment Sector Council, the finalised National Occupational Standard for Heavy Vehicle Maintenance will be submitted to the Maldives Qualification Authority (MQA) for final approval. Upon receiving MQA approval, the standard will be officially published on the Maldives National Skills Development Authority (MNSDA) website. This publication will enable training providers in the Maldives to utilise the standard for delivering the Heavy Vehicle Maintenance program, ensuring its widespread implementation across the country

Description of “Heavy Vehicle Maintenance”

The "Heavy Vehicle Maintenance" standard serves as a foundational guideline designed to enhance essential skills within the heavy vehicle industry. This program is dedicated to equipping individuals with the fundamental competencies crucial for proficient maintenance and operation of large commercial and industrial vehicles, ensuring their safe and efficient performance in various settings. Participants will gain practical insights into routine servicing, engine and component repairs, electrical system diagnostics, and transmission and driveline maintenance. The program emphasises the importance of regular inspections and preventive measures to prevent breakdowns and extend vehicle lifespan.

The certification acts as an entry point for professionals venturing into the heavy vehicle maintenance sector, providing a robust foundation in the essential skills required to handle various mechanical and technical challenges. This standard is particularly beneficial for individuals aiming to ensure personal safety, maintain effective communication within a maintenance team, and contribute to overall vehicle safety and reliability in their communities.

Proposed Qualification Titles

Following are the recommended titles by the selected internal expert team of MIT for the National Certificate III in Heavy Vehicle Maintenance.

1. Nil

Job opportunities upon completion of “National Certificate III in Heavy Vehicle Maintenance”

Upon successful completion of the National Certificate III in Heavy Vehicle Maintenance, students can work in the following jobs.

1. *Heavy Vehicle Maintenance Assistant Officer*
2. *Service Maintenance Technician*

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 within 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 HEAVY VEHICLE MAINTENANCE		
3. Qualification code: TRA-07L3-V1-25		Total Number of Credits: 75
4. Purpose of the qualification This qualification aims is to equip individuals with comprehensive skills and knowledge essential for the effective maintenance and repair of heavy vehicles. Moreover, to develop competent professionals capable of ensuring the safe, efficient, and reliable operation of large commercial and industrial vehicles. It emphasises practical and theoretical expertise in routine servicing, engine and component repairs, electrical diagnostics, and transmission maintenance, while also focusing on adherence to safety standards and regulatory compliance to enhance overall vehicle performance and safety.		
5. Regulations for the qualification		National Certificate III in Heavy Vehicle Maintenance 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+16+17+18 +19 +20
6. Schedule of Units		
Unit No.	Unit Title	Code
Common Competencies		
1	Apply work ethics and optimise professionalism	TRA-07-CM01-V1-25
2	Practice effective workplace communication	TRA-01-CM03-V3-24
3	Perform computer operations	TRA-01-CM05-V3-24
4	Respond to emergency situations	TRA-01-CM06-V3-24
Core Competencies		
5	Understand heavy vehicle maintenance fundamentals	TRA-07-CC01-V1-25
6	Apply health and safety for heavy vehicle	TRA-07-CC02-V1-25
7	Apply workshop technology practices	TRA-07-CC03-V1-25
8	Perform routine servicing operations	TRA-07-CC04-V1-25
9	Inspect and repair heavy vehicle engines and components	TRA-07-CC05-V1-25
10	Diagnose and rectify electrical systems	TRA-07-CC06-V1-25
11	Repair and maintenance equipment AC system	TRA-07-CC07-V1-25
12	Repair transmission and driveline components	TRA-07-CC08-V1-25
13	Inspect and maintain braking systems	TRA-07-CC09-V1-25
14	Inspect and repair tire and wheel	TRA-07-CC10-V1-25
15	Diagnose and repair steering and suspension systems	TRA-07-CC11-V1-25
16	Maintain and repair hydraulic systems	TRA-07-CC12-V1-25

17	Maintain and repair pneumatic system	TRA-07-CC13-V1-25
18	Inspect and maintain fuel systems	TRA-07-CC14-V1-25
19	Identify and rectify engine cooling systems	TRA-07-CC15-V1-25
20	Perform heavy vehicle safety inspections	TRA-07-CC16-V1-25
7. Accreditation requirements		The training provider should have a workshop or similar training facility to provide the trainees the hands-on experience related to this qualification and make arrangements for providing industrial experience.
8. Recommended sequencing of units		As appearing under the section 06

Unit Details

Unit No.	Unit Title	Code	Level	No. of credits	Credit hours	Contact hours
1	Apply work ethics and optimise professionalism	TRA-07-CM01-V1-25	III	03	30	15
2	Practice effective workplace communication	TRA-01-CM03-V3-24	III	03	30	15
3	Perform computer operations	TRA-01-CM05-V3-24	III	03	30	15
4	Respond to emergency situations	TRA-01-CM06-V3-24	III	05	50	25
5	Understand heavy vehicle maintenance fundamentals	TRA-07-CC01-V1-25	III	04	40	20
6	Apply health and safety for heavy vehicle	TRA-07-CC02-V1-25	III	02	20	10
7	Apply workshop technology practices	TRA-07-CC03-V1-25	III	02	20	10
8	Perform routine servicing operations	TRA-07-CC04-V1-25	III	04	40	20
9	Inspect and repair heavy vehicle engines and components	TRA-07-CC05-V1-25	III	06	60	30
10	Diagnose and rectify electrical systems	TRA-07-CC06-V1-25	III	04	40	20
11	Repair and maintenance equipment AC system	TRA-07-CC07-V1-25	III	03	30	15
12	Repair transmission and driveline components	TRA-07-CC08-V1-25	III	03	30	15
13	Inspect and maintain braking systems	TRA-07-CC09-V1-25	III	04	40	20
14	Inspect and repair tire and wheel	TRA-07-CC10-V1-25	III	04	40	20
15	Diagnose and repair steering and suspension systems	TRA-07-CC11-V1-25	III	04	40	20
16	Maintain and repair hydraulic systems	TRA-07-CC12-V1-25	III	04	40	20
17	Maintain and repair pneumatic system	TRA-07-CC13-V1-25	III	04	40	20
18	Inspect and maintain fuel systems	TRA-07-CC14-V1-25	III	04	40	20
19	Identify and rectify engine cooling systems	TRA-07-CC15-V1-25	III	04	40	20
20	Perform heavy vehicle safety inspections	TRA-07-CC16-V1-25	III	05	50	25

Total	75	750	375
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Packaging of National Qualifications:

National certificate III in Heavy Vehicle Maintenance 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+16+17+18+19+20

Qualification Code: TRA-07L3-V1-25

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.