



Model Curriculum

QP Name: Four Wheeler Service Assistant

QP Code: ASC/Q1401

QP Version: 5.0

NSQF Level: 3

Model Curriculum Version: 2.0

Automotive Skill Development Council

153, Gr Floor, Okhla Industrial Area, Phase – III, Leela Building, New Delhi – 110020

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Training Parameters

Sector	Automotive Skills Development Council
Sub-Sector	Automotive Service
Occupation	Technical Service & Repair
Country	India
NSQF Level	3
Aligned to NCO/ISCO/ISIC Code	NCO-2015/3115.0602
Minimum Educational Qualification & Experience	5th Class pass with 4 years of relevant experience OR 8th Class with 1 year of relevant experience OR 9th Class pass OR Certificate-NSQF (Automotive Washer L2) with 2 years of relevant experience
Pre-Requisite License or Training	NA
Minimum Job Entry Age	18 Years
Last Reviewed On	17/11/2022
Next Review Date	17/11/2025
NSQC Approval Date	17/11/2022
QP Version	5.0
Model Curriculum Creation Date	17/11/2022
Model Curriculum Valid Up to Date	17/11/2025
Model Curriculum Version	2.0
Minimum Duration of the Course	390 Hours, 0 Minutes
Maximum Duration of the Course	390 Hours, 0 Minutes

Program Overview

This section summarizes the end objectives of the program along with its duration.

Training Outcomes

At the end of the program, the learner should have acquired the listed knowledge and skills.

- Assist the service technician in service and maintenance of vehicles.
- Work effectively and efficiently as per schedules and timelines while complying with the health and hygiene norms.
- Implement safety practices.
- Optimize the use of resources to ensure less wastage and maximum conservation.
- Communicate effectively and develop interpersonal skills.
- Display sensitivity towards all genders and differently abled people.

Compulsory Modules

The table lists the modules and their duration corresponding to the Compulsory NOS of the QP.

NOS and Module Details	Theory Duration	Practical Duration	On-the-Job Training Duration (Mandatory)	On-the-Job Training Duration (Recommended)	Total Duration
Bridge Module	05:00	00:00	-	-	05:00
Module 1: Introduction to the role of a Four Wheeler service Assistant <i>Bridge Module</i>	05:00	00:00	-	-	05:00
ASC/N9801 - Organize Work and Resources (Service) NOS Version No. 1.0 NSQF Level 4	20:00	35:00	-	-	55:00
Module 2: Work effectively and efficiently	10:00	20:00	-	-	30:00
Module 3: Optimize resource utilization	10:00	15:00	-	-	25:00
DGT/VSQ/N0101 - Employability Skills (30 hours) NOS Version No. – 1.0 NSQF Level – 2	12:00	18:00			30:00

Module 4: Introduction to Employability Skills	0.5:00	0.5:00			1:00
Module 5: Constitutional values - Citizenship	0.5:00	0.5:00			1:00
Module 6: Becoming a Professional in the 21st Century	0.5:00	0.5:00			1:00
Module 7: Basic English Skills	1:00	1:00			2:00
Module 8: Communication Skills	1.5:00	2.5:00			4:00
Module 9: Diversity & Inclusion	0.5:00	0.5:00			1:00
Module 10: Financial and Legal Literacy	1.5:00	2.5:00			4:00
Module 11: Essential Digital Skills	1:00	2:00			3:00
Module 12: Entrepreneurship	2.5:00	4.5:00			7:00
Module 13: Customer Service	1.5:00	2.5:00			4:00
Module 14: Getting ready for apprenticeship & Jobs	1:00	1:00			2:00
ASC/N1401 Assist in service, maintenance, and repair of the vehicle NOS Version No. 2.0 NSQF Level 3	95:00	175:00	30:00	-	270:00
Module 15: Assist in Vehicle Maintenance	95:00	175:00	30:00	-	270:00
Total Duration	132:00	228:00	30:00	-	390:00

Module Details

Module 1: Introduction to the Role of a Four Wheeler Service Assistant

Bridge Module

Terminal Outcomes:

- Discuss how to work as per the defined role and responsibilities of a Four Wheeler Service Assistant.

Duration: 05:00	Duration: 00:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Describe the role and responsibilities of a Four Wheeler Service Assistant. • List the errands and activities with which the service technicians need to be assisted such as fetching parts, tools, gauges, etc. • Identify the different locations in the workshops for designated tasks, such as platforms for service, area for minor repairs, areas for routine maintenance etc. • Discuss the standard operating procedures (SOP) to be followed for use of tools and equipment, service and minor repairs and pollution check. • Describe the importance of maintaining documents involved in the vehicle service and repair process such as job sheet, status report, etc. • State the necessary precautions to be taken during service/repair/maintenance • Explain the organisational policies and professional code of conduct of the dealer/workshop 	
Classroom Aids:	
Laptop, white board, marker, projector	
Tools, Equipment and Other Requirements	

Module 2: Work Effectively and Efficiently

Mapped to NOS ASC/N9801, v1.0

Terminal Outcomes:

- Employ appropriate ways to maintain a safe and secure working environment.
- Perform work as per the quality standards.

Duration: 10:00	Duration: 20:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> ● Outline the organizational structure to be followed to report about health, safety and security breaches to the concerned authorities. ● List the potential workplace related risks and hazards, their causes and preventions. ● State the methods to keep the work area clean and tidy. ● Discuss how to complete the given work within the stipulated time period. ● Explain how to maintain a proper balance between team and individual goals. ● Discuss epidemics and pandemics and their impact on society at large. ● Discuss the significance of conforming to basic hygiene practices such as washing hands, using alcohol-based hand sanitizers. ● Discuss the use of proper PPE for maintaining health and hygiene at workplace and the process of wearing/discarding them. ● Define self-quarantine or self-isolation. ● Discuss the importance of identifying and reporting symptoms to the concerned authorities. ● Explain the significance of following prescribed rules and guidelines during an epidemic or a pandemic. ● Discuss organizational hygiene and sanitation guidelines and ways of reporting breaches/gaps if any. ● Discuss the ways of dealing with stress and anxiety during an epidemic or a pandemic. 	<ul style="list-style-type: none"> ● Perform routine cleaning of tools, equipment and machines. ● Employ various techniques for checking malfunctions in the equipment as per Standard Operating Procedure (SOP). ● Apply basic housekeeping practices to ensure that the work area is clean, such as mopping spills and leaks, cleaning grease stains etc. ● Demonstrate how to evacuate the workplace in case of an emergency. ● Show how to sanitize and disinfect one's work area regularly. ● Demonstrate the correct way of washing hands using soap and water. ● Demonstrate the correct way of sanitizing hands using alcohol-based hand rubs. ● Display the correct way of wearing and removing PPE such as face masks, hand gloves, face shields, PPE suits, etc. ● Demonstrate appropriate social and behavioural etiquette (greeting and meeting people, spitting/coughing/sneezing, etc.). ● Prepare a list of relevant hotline/emergency numbers.

Classroom Aids:

White board/black board marker/chalk, duster, computer or Laptop attached to LCD projector

Tools, Equipment and Other Requirements

Personal Protection Equipment: safety glasses, head protection, rubber gloves, safety footwear, warning signs and tapes, fire extinguisher and first aid kit

Sanitization kit, disinfectants, alcohol-based sanitizers, different types of face masks, shields, suits, etc.

Module 3: Optimize Resource Utilization

Mapped to NOS ASC/N9801, v1.0

Terminal Outcomes:

- Use the resources efficiently.
- Apply conservation practices at the workplace.

Duration: 10:00	Duration: 15:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> ● Explain the ways to optimize usage of resources. ● Discuss various methods of waste management and its disposal. ● List the different categories of waste for the purpose of segregation ● Differentiate between recyclable and non-recyclable waste ● State the importance of using appropriate colour dustbins for different types of waste. ● Discuss the common sources of pollution and ways to minimize it. 	<ul style="list-style-type: none"> ● Perform basic checks to identify any spills and leaks and that need to be plugged /stopped. ● Demonstrate different disposal techniques depending upon different types of waste. ● Employ different ways to check if equipment/machines are functioning as per requirements and report malfunctioning, if observed. ● Employ ways for efficient utilization of material and water ● Use energy efficient electrical appliances and devices to ensure energy conservation
Classroom Aids:	
White board/black board marker/chalk, duster, computer or Laptop attached to LCD projector	
Tools, Equipment and Other Requirements	
Different type of waste bins to collect and segregate waste for disposal	

Module 4: Introduction to Employability Skills

Mapped to DGT/VSQ/N0101

Terminal Outcomes:

- Discuss about Employability Skills in meeting the job requirements

Duration: <0.5:00>	Duration: <0.5:00>
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Discuss the importance of Employability Skills in meeting the job requirements 	<ul style="list-style-type: none"> • Demonstrate Employability Skills
Classroom Aids:	
Whiteboard, marker pen, projector	
Tools, Equipment and Other Requirements	

Module 5: Constitutional values - Citizenship

Mapped to DGT/VSQ/N0101

Terminal Outcomes:

- Discuss about constitutional values to be followed to become a responsible citizen

Duration: <0.5:00>	Duration: <0.5:00>
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Explain constitutional values, civic rights, duties, citizenship, responsibility towards society etc. that are required to be followed to become a responsible citizen. 	<ul style="list-style-type: none"> • Show how to practice different environmentally sustainable practices
Classroom Aids:	
Whiteboard, marker pen, projector	
Tools, Equipment and Other Requirements	

Module 6: Becoming a Professional in the 21st Century

Mapped to DGT/VSQ/N0101

Terminal Outcomes:

- Demonstrate professional skills required in 21st century

Duration: <0.5:00>	Duration: <0.5:00>
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Discuss 21st century skills. 	<ul style="list-style-type: none"> • Display positive attitude, self -motivation, problem solving, time management skills and continuous learning mindset in different situations.
Classroom Aids:	
Whiteboard, marker pen, projector	
Tools, Equipment and Other Requirements	

Module 7: Basic English Skills

Mapped to DGT/VSQ/N0101

Terminal Outcomes:

- Practice basic English speaking.

Duration: <1:00>	Duration: <1:00>
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Discuss need of basic English skills. 	<ul style="list-style-type: none"> • Use appropriate basic English sentences/phrases while speaking
Classroom Aids:	
Whiteboard, marker pen, projector	
Tools, Equipment and Other Requirements	

Module 8: Communication Skills

Mapped to DGT/VSQ/N0101

Terminal Outcomes:

- Practice basic communication skills.

Duration: <1.5:00>	Duration: <2.5:00>
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Discuss need of communication skills • Describe importance of team work 	<ul style="list-style-type: none"> • Demonstrate how to communicate in a well -mannered way with others. • Demonstrate working with others in a team
Classroom Aids:	
Whiteboard, marker pen, projector	
Tools, Equipment and Other Requirements	

Module 9: Diversity & Inclusion

Mapped to DGT/VSQ/N0101

Terminal Outcomes:

- Describe PwD and gender sensitisation.

Duration: <0.5:00>	Duration: <0.5:00>
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Discuss the significance of reporting sexual harassment issues in time 	<ul style="list-style-type: none"> • Show how to conduct oneself appropriately with all genders and PwD
Classroom Aids:	
Whiteboard, marker pen, projector	
Tools, Equipment and Other Requirements	

Module 10: Financial and Legal Literacy

Mapped to DGT/VSQ/N0101

Terminal Outcomes:

- Describe ways of managing expenses, income, and savings.

Duration: <1.5:00>	Duration: <2.5:00>
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> Discuss the significance of using financial products and services safely and securely. Explain the importance of managing expenses, income, and savings. Explain the significance of approaching the concerned authorities in time for any exploitation as per legal rights and laws 	<ul style="list-style-type: none"> Demonstrate ways of managing expenses, income, and savings.
Classroom Aids:	
Whiteboard, marker pen, projector	
Tools, Equipment and Other Requirements	

Module 11: Essential Digital Skills

Mapped to DGT/VSQ/N0101

Terminal Outcomes:

- Demonstrate procedure of operating digital devices and associated applications safely.

Duration: <1:00>	Duration: <2:00>
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> Discuss the significance of using internet for browsing, accessing social media platforms, safely and securely 	<ul style="list-style-type: none"> Show how to operate digital devices and use the associated applications and features, safely and securely
Classroom Aids:	
Whiteboard, marker pen, projector	
Tools, Equipment and Other Requirements	

Module 12: Entrepreneurship

Mapped to DGT/VSQ/N0101

Terminal Outcomes:

- Describe opportunities as an entrepreneur.

Duration: <2.5:00>	Duration: <4.5:00>
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> Discuss the need for identifying opportunities for potential business, sources for arranging money and potential legal and financial challenges 	<ul style="list-style-type: none"> Demonstrate ways for identifying opportunities for potential business, sources for arranging money and potential legal and financial challenges
Classroom Aids:	
Whiteboard, marker pen, projector	
Tools, Equipment and Other Requirements	

Module 13: Customer Service

Mapped to DGT/VSQ/N0101

Terminal Outcomes:

- Describe ways of maintaining customer.

Duration: <1.5:00>	Duration: <2.5:00>
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> Differentiate between types of customers. Explain the significance of identifying customer needs and addressing them. Discuss the significance of maintaining hygiene and dressing appropriately. 	<ul style="list-style-type: none"> Show how to maintain hygiene and dressing appropriately.
Classroom Aids:	
Whiteboard, marker pen, projector	
Tools, Equipment and Other Requirements	

Module 14: Getting ready for apprenticeship & Jobs

Mapped to DGT/VSQ/N0101

Terminal Outcomes:

- Describe ways of preparing for apprenticeship & Jobs appropriately.

Duration: <1:00>	Duration: <1:00>
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Discuss the significance of dressing up neatly and maintaining hygiene for an interview • Discuss how to search and register for apprenticeship opportunities 	<ul style="list-style-type: none"> • Create a biodata • Use various sources to search and apply for jobs
Classroom Aids:	
Whiteboard, marker pen, projector	
Tools, Equipment and Other Requirements	

Module 15: Assist in Vehicle Maintenance

Mapped to NOS ASC/N1401, v2.0

Terminal Outcomes:

- Use the specified procedures to prepare for service, maintenance and repair of the vehicle.
- Discuss how to assist seniors in repair and maintenance related tasks.
- Perform the steps to check the pollution level and provide the PUC certificate.

Duration: 95:00	Duration: 205:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> ● List the considerations for choosing the suitable platform for service, maintenance and repair. ● Explain the basic functioning of the different types of engines such as diesel, petrol, electrical, gas etc. ● Discuss how to select the right tools, measuring instruments, vehicle parts and other supplies with the help of seniors. ● Describe the auto components and their specifications. ● Outline the organizational structure to be followed to report any malfunction to the concerned authorities for rectification. ● Discuss the considerations for visual inspection of the vehicle. ● State the importance of complying with standard operating procedures and other vehicle service manuals to ensure no damage to the vehicle while repairing. ● Explain the importance of maintaining proper documentation of the repairing process. ● Describe the importance of checking the previous PUC certificate to verify vehicle details. ● State the general safety, health and environment policies to be followed at the workplace. 	<ul style="list-style-type: none"> ● Use different types of measuring equipment and service tools such as hydrometer, battery charger, oil pressure gauges, and slide hammers etc. ● Demonstrate the functioning of the batteries, power storage system, power-generating systems, electronic systems etc. ● Employ standard techniques to arrange the required tools and equipment and clean the work area. ● Perform routine service/maintenance of the component/vehicle for lubrication, wheel balancing, cleaning etc. under supervision of seniors. ● Demonstrate the dismantling process of components such as suspension steering system, cooling system, engine gearbox etc. under supervision of seniors. ● Use appropriate software and hardware to perform PUC (Pollution Under Control) check under supervision of seniors. ● Prepare a sample report of the PUC readings and compare it with the set standards. ● Prepare a PUC certificate with the use of an appropriate software.

- Discuss the importance of following manufacturer and OEM guidelines while working with the vehicle.

Classroom Aids:

Laptop, white board, marker, projector

Tools, Equipment and Other Requirements

4-wheeler Vehicle, various body parts, engine, tools and equipment, material, mechanical and electrical components/aggregates, lubricants, grease, oil, etc.

Feeler gauges, torque wrench, multimeter, engineering rule (scale), battery charger, tester, hydrometer, tachometer etc. Fuel pressure testers, manifold gauge sets, oil pressure gauges, tire pressure gauges etc., and ball joint separators, bearing pullers, gear puller tools, slide hammers etc., software and hardware for PUC check, PUC certificate, Documents of standard operating procedures (SOPs), Policy documents,

Annexure

Trainer Requirements

Trainer Prerequisites						
Minimum Educational Qualification	Specialization	Relevant Industry Experience		Training Experience		Remarks
		Years	Specialization	Years	Specialization	
ITI	Mechanic Motor Vehicle/Diesel Motor Vehicle	3	Four Wheeler Service	1	Four Wheeler Service	NA
ITI	Mechanic Motor Vehicle/Diesel Motor Vehicle	4	Four Wheeler Service	0	Four Wheeler Service	NA
Certificate-NSQF Level 5	Four Wheeler Lead Technician	3	Four Wheeler Service	1	Four Wheeler Service	NA
Diploma	Automobile/Mechanical	2	Four Wheeler Service	1	Four Wheeler Service	NA
Diploma	Automobile/Mechanical	3	Four Wheeler Service	0	Four Wheeler Service	NA

Trainer Certification	
Domain Certification	Platform Certification
“Four Wheeler Service Assistant”, “ASC/Q1401”, minimum accepted score is 80%	“Trainer”, “MEP/Q2601”, with scoring of minimum 80%.

Assessor Requirements

Assessor Prerequisites						
Minimum Educational Qualification	Specialization	Relevant Industry Experience		Training/Assessment Experience		Remarks
		Years	Specialization	Years	Specialization	
ITI	Automobile Engineering/ Mechanical Engineering/ Motor Vehicle Mechanic	4	Four Wheeler Service	1	Four Wheeler Service	NA
ITI	Automobile Engineering/ Mechanical Engineering/ Motor Vehicle Mechanic	5	Four Wheeler Service	0	Four Wheeler Service	NA
Certificate-NSQF Level 5	Four Wheeler Lead Technician	4	Four Wheeler Service	1	Four Wheeler Service	NA
Diploma	Automobile/ Mechanical	3	Four Wheeler Service	1	Four Wheeler Service	NA
Diploma	Automobile/ Mechanical	4	Four Wheeler Service	0	Four Wheeler Service	NA

Assessor Certification	
Domain Certification	Platform Certification
“Four Wheeler Service Assistant”, “ASC/Q1401”, minimum accepted score is 80%	“Assessor”, “MEP/Q2701”, with scoring of minimum 80%

Assessment Strategy

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 – The assessor should:

- Confirm that the centre is available at the same address as mentioned on SDMS or SIP
- Check the duration of the training.
- Check the Assessment Start and End time to be as 10 a.m. and 5 p.m.
- 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.
- Check the mode of assessment—Online (TAB/Computer) or Offline (OMR/PP).
- Confirm the number of TABs on the ground are correct to execute the Assessment smoothly.
- Check the availability of the Lab Equipment for the particular Job Role.

3. Assessment Quality Assurance levels/Framework:

- Question papers are created by the Subject Matter Experts (SME)
- Question papers created by the SME are verified by the other subject Matter Experts
- Questions are mapped with NOS and PC
- Question papers are prepared considering that level 1 to 3 are for the unskilled & semi-skilled individuals, and level 4 and above are for the skilled, supervisor & higher management
- Assessor must be ToA certified & trainer must be ToT Certified
- Assessment agency must follow the assessment guidelines to conduct the assessment

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
- Biometric or manual attendance sheet (stamped by TP) of the trainees during the training period
- Time-stamped & geotagged assessment (Theory + Viva + Practical) photographs & videos

5. Method of verification or validation:

- Surprise visit to the assessment location
- Random audit of the batch
- Random audit of any candidate

6. Method for assessment documentation, archiving, and access

- Hard copies of the documents are stored
- Soft copies of the documents & photographs of the assessment are uploaded/accessed from Cloud Storage
- Soft copies of the documents & photographs of the assessment are stored in the Hard Drives

References

Glossary

Term	Description
Declarative Knowledge	Declarative knowledge refers to facts, concepts and principles that need to be known and/or understood in order to accomplish a task or to solve a problem.
Key Learning Outcome	Key learning outcome is the statement of what a learner needs to know, understand and be able to do in order to achieve the terminal outcomes. A set of key learning outcomes will make up the training outcomes. Training outcome is specified in terms of knowledge, understanding (theory) and skills (practical application).
OJT (M)	On-the-job training (Mandatory); trainees are mandated to complete specified hours of training on site
OJT (R)	On-the-job training (Recommended); trainees are recommended the specified hours of training on site
Procedural Knowledge	Procedural knowledge addresses how to do something, or how to perform a task. It is the ability to work, or produce a tangible work output by applying cognitive, affective or psychomotor skills.
Training Outcome	Training outcome is a statement of what a learner will know, understand and be able to do upon the completion of the training.
Terminal Outcome	Terminal outcome is a statement of what a learner will know, understand and be able to do upon the completion of a module. A set of terminal outcomes help to achieve the training outcome.

Acronyms and Abbreviations

NOS	National Occupational Standard(s)
NSQF	National Skills Qualifications Framework
QP	Qualifications Pack
TVET	Technical and Vocational Education and Training
OEM	Original Equipment Manufacturer
CNG	Compressed Natural Gas
LPG	Liquefied Petroleum Gas
PUC	Pollution Under Control
PwD	Persons with Disability