Model Curriculum

QP Name: Automotive Service Quality Controller

QP Code: ASC/Q1427

QP Version: 2.0

NSQF Level: 6

Model Curriculum Version: 1.0

Automotive Skills Development Council
Leela Building, 153 GF, Okhla Phase III, Okhla Industrial Area, New Delhi, Delhi 110020

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Training Parameters

Sector	Automotive
Sub-Sector	Automotive Vehicle Service
Occupation	Technical Service & Repair
Country	India
NSQF Level	6
Aligned to NCO/ISCO/ISIC Code	NCO-2015/3139.5002
Minimum Educational Qualification & Experience	10th Class + I.T.I (Mechanic Auto Electrical and Electronics/ Mechanic Diesel/ Mechanic Motor Vehicle (MMV)) with 4 Years of relevant experience OR 3 years Diploma (Automobile/Mechanical Electrical/Electronics) from recognized regulatory body with 3 Year of relevant experience after Class 12th OR Certificate-NSQF (Four Wheeler Lead Technician Level 5) with 3 Years of relevant experience Automotive Service
Pre-Requisite License or Training	Permanent driving Licence
Minimum Job Entry Age	20 Years
Last Reviewed On	30/09/2021
Next Review Date	30/09/2024
NSQC Approval Date	30/09/2021
Version	2.0
Model Curriculum Creation Date	30/09/2021
Model Curriculum Valid Up to Date	30/09/2024
Model Curriculum Version	1.0
Minimum Duration of the Course	570 Hours, 0 Minutes
Maximum Duration of the Course	570 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.

- Plan and manage work and resources efficiently ensuring least wastage and optimal usage.
- Supervise team to ensure implementation safety practices.
- Communicate effectively and develop interpersonal skills with others.
- Display sensitivity towards all genders and differently abled people.
- Demonstrate conducting quality control checks.

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 an Automotive Service Quality Controller *Bridge Module*	05:00	00:00	-	-	05:00
ASC/N9813 - Manage work and resources (Service) **NOS Version No. 1.0** **NSQF Level 6**	**20:00**	**40:00**	-	-	**60:00**
Module 2: Plan work effectively, implement safety practices and optimize resources	20:00	40:00	-	-	60:00
ASC/N9812 – Interact effectively with team, customers and others **NOS Version No. 1.0** **NSQF Level 6**	**20:00**	**35:00**	-	-	**55:00**
Module 3: Communicate effectively and efficiently	20:00	35:00	-	-	55:00
ASC/N1443: Perform quality control checks **NOS Version No. 2.0** **NSQF Level 6**	**120:00**	**330:00**	-	-	**450:00**

Module 4: Performing Quality Control Checks	120:00	330:00	-	-	450:00
Total Duration	**165:00**	**405:00**	-	-	**570:00**

Module Details

Module 1: Introduction to the Role of an Automotive Service Quality Controller
Bridge Module

Terminal Outcomes:

- Discuss the role and responsibilities of an Automotive Service Quality Controller.

Duration: *05:00*	**Duration**: *00:00*
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
• List the role and responsibilities of an Automotive Service Quality Controller. • Explain about automotive industry in India, workshop structure and role and responsibilities of different people in the workshop. • Elaborate standard operating procedures (SOPs) regarding receiving vehicles, opening job card, allocation of work, invoicing, vehicle delivery, handling complaints etc. • Recall the documentation involved in the different processes as specified by OEM/ auto component manufacturer. • Discuss the importance of inspection and diagnosis of faults by optimum utilization of tools and equipment as per SOP. • Discuss the importance of working as per organisational policies, professional code of ethics and standards of practice. • Outline the safety, health and environmental policies and regulations for the work place as well as for automotive trade in general. • Discuss occupational health and safety measures (OSH) required for working on vehicles. • Discuss the legal regulations pertaining to vehicles.	
Classroom Aids:	
Laptop, white board, marker, projector	
Tools, Equipment and Other Requirements	

Module 2: Plan Work Effectively and Implement Safety Practices
Mapped to NOS ASC/N9813, v1.0

Terminal Outcomes:

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

Duration: *20:00*	**Duration**: *40:00*
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
• List the potential workplace related risks and hazards, their causes and preventions. • Outline the organizational structure to be followed to report about health, safety and security breaches to the concerned authorities. • Describe the procedures to report accident and health related issues as per SOP • Identify the importance of standard operating procedures of the company w.r.t. privacy, confidentiality and security. • List and explain work requirements to be followed by the team. • List some common practices for efficient utilisation of energy, material and water. • Discuss the specified quality standards for work requirements and corrective action to be taken in case work fails to meet the requirements. • Discuss the importance of conducting trainings to develop work expertise. • Discuss the importance of working as per the agreed and assigned requirement. • Identify the issues with process flow improvements, quality of output, product defects received from previous process, repairs and maintenance of tools and machinery and handle them • Define ways to optimize usage of resources • Discuss different set of problems along with their causes and possible solutions.	• Apply appropriate techniques in the work process to save cost and time . • Employ ways to ensure that the team complies with organisation's health, safety policies and procedures. • Keep a check on the routine cleaning of tools, machine and equipment. • Employ different ways to ensure that the team periodically checks tools, equipment and machines. • Apply appropriate techniques to use the resources judiciously. • Demonstrate checking for malfunctions in equipment and report as per SOP • Employ ways to ensure that the team periodically checks for spills and leaks and plugs the same and keeps work area clean and tidy. • Demonstrate segregation of hazardous waste. • Show how to dispose non-recyclable waste and hazardous waste responsibly. • Demonstrate how to follow the organisation's emergency procedures for different emergencies. • Prepare a sample layout of the workshop depicting the location of all the electrical, hydraulic and thermal equipment used.

• Discuss the concept of waste management and methods of waste disposal • List the different categories of waste for the purpose of segregation • State the importance of timely completion of tasks • Discuss the significance of sanitizing the workplace, equipment etc. • Summarise hygiene and sanitation regulations. • Discuss the ways of helping team members deal with stress and anxiety • Explain various ways of time and cost management • Discuss the use of proper PPE for maintaining health and hygiene at workplace and the process of wearing/discarding them. • List some common electrical problems and practices of conserving electricity. • State the importance of using appropriate colour dustbins for different types of waste. • Discuss organizational procedures for minimizing waste. • Discuss the importance of maintaining quality and timely delivery of the services as per the goals set by the manager. • Discuss the common sources of pollution and ways to minimize it. • Discuss organisation's policies for maintaining personal health and hygiene at workplace. • Discuss the significance of greening. • List the requirements like running water, sanitizers, etc. to be checked beforehand at workplace. • Recall the key performance indicators for the new tasks.	

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

Module 3: Communicate Effectively and Efficiently

Mapped to NOS ASC/N9812, v1.0

Terminal Outcomes:

- Use effective communication and interpersonal skills.
- Apply sensitivity while interacting with different genders and people with disabilities.

Duration: *20:00*	**Duration**: *35:00*
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
• Explain the importance of complying with organizational requirements to share information with team members. • Discuss the ways to adjust the communication styles to reflect sensitivity towards gender and persons with disability (PwD). • Explain the importance of respecting personal space of colleagues and customers. • Describe the ways to manage and coordinate with team members for work integration. • State the importance of team goals over individual goals, keeping commitment made to team members, and informing them in case of delays. • Discuss the importance of following the organisation's policies and procedures • Discuss the importance of rectifying errors as per feedback and minimizing mistakes. • Discuss gender-based concepts, issues and legislation as well organization standards, guidelines, rights and duties of PwD. • Discuss the importance of PwD and gender sensitization to ensure that team shows sensitivity towards them. • State the importance of following organizational standards and guidelines related to PwD. • Recall the rights and duties at workplace with respect to PwD. • Outline organisation policies and procedures pertaining to written and verbal communication.	• Employ different means and methods of communication depending upon the requirement to interact with the team members. • Employ appropriate ways to maintain good relationships with team members and superiors. • Apply appropriate techniques to resolve conflicts and manage team members for smooth workflow. • Conduct training sessions to train the team members on proper reporting of completed work and receiving feedback. • Employ suitable ways to escalate problems to superiors as and when required. • Prepare a sample report on the progress and team performance . • Role play a situation on how to offer help to people with disability (PwD) if required at work.
Classroom Aids:	

White board/black board marker/chalk, duster, computer or Laptop attached to LCD projector
Tools, Equipment and Other Requirements

Module 4: Performing Quality Control Checks
Mapped to NOS ASC/N1443, *v2.0*

Terminal Outcomes:

- Perform steps to periodically manage and perform quality checks.
- Employ techniques to ensure that the service team adheres to quality standards.

Duration: *120:00*	**Duration**: *330:00*
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
• Explain how to develop plans in coordination with the workshop manager and supervisors/service advisors for conducting quality control checks. • Emphasize on the importance of performing periodic planned inspections to monitor the quality of the processes and services. • Discuss the significance of using precision tools and gauges for supervising inspection of auto parts, components and material. • Describe how to evaluate whether a reconditioned aggregate is fit for use or adding a new part or repair of an existing part would be a better solution. • Explain how to get the discrepancies, if any detected, fixed to match the quality as per the job card specifications. • Discuss how to update the maintenance and service bulletin books as per standards based on quality checks cleared and correspondingly inform all concerned personnel. • Describe how to supervise the quality control processes by conducting regular inspections and ensuring adherence to all ISO standards by the service team. • Emphasize the importance of strict adherence to audit schedules for each process as per defined formats and frequency during service and repair. • Identify the steps for ensuring that all quality documents are properly stored/maintained for easy and faster retrieval. • Explain how to analyse if any new certifications are needed for quality aspects in the workshop like Kaizen.	• Demonstrate how to create inspection criteria for verifying the quality of services and parts. • Employ various methods for performing quality checks on vehicles based on pre0defined parameters. • Perform steps for visually inspecting the interiors of vehicles for various parameters such as no fingerprints, foot prints, etc. • Implement different techniques to perform inspections related to quality checks of vehicles such as verifying wheel alignments, ensuring thorough car wash, etc. • Demonstrate how send quality control status reports, including any discrepancy, to managers and supervisors. • Perform the steps for developing and successfully implementing quality control processes for efficient daily operations. • Implement proper techniques for maintaining the certification standards set for quality management, customer services par excellence, effective environment management system (EMS) etc. and recording the same in documents of the MIS. •
Classroom Aids:	

White board/ black board marker / chalk, duster, computer or Laptop attached to LCD projector
Tools, Equipment and Other Requirements
Reports, job cards, documents used in the dealership/workshop

Annexure

Trainer Requirements

Trainer Prerequisites						
Minimum Educational Qualification	**Specialization**	**Relevant Industry Experience**		**Training Experience**		**Remarks**
		Years	***Specialization***	***Years***	***Specialization***	
ITI	Mechanic Motor Vehicle/Mechanic Auto Electrical and Electronics/Diesel Mechanic	7	Two/Four Wheeler service	1	Two/Four wheeler service	NA
ITI	Mechanic Motor Vehicle/Mechanic Auto Electrical and Electronics/Diesel Mechanic	8	Two/ four wheeler service	0	Two/four wheeler service	NA
Diploma	Automobile Engineering/ Mechanical Engineering	6	Two/Four Wheeler Service	1	Two/Four Wheeler Service	NA
Diploma	Automobile Engineering/ Mechanical Engineering	7	Two/Four Wheeler Service	0	Two/Four Wheeler Service	NA
BE/ B. Tech	Automobile Engineering/ Mechanical Engineering	5	Two/Four Wheeler Service	1	Two/Four Wheeler Service	NA

Trainer Certification	
Domain Certification	**Platform Certification**
Certified for Job Role: "Automotive Service Quality Controller Level 6" "ASC/Q1427, v1.0", Minimum accepted score is 80%	Recommended that the Trainer is certified for the Job Role: "Trainer", "MEP/Q2601, v1.0", Minimum accepted score is 80%

Assessor Requirements

Assessor Prerequisites						
Minimum Educational Qualification	**Specialization**	**Relevant Industry Experience**		**Training Experience**		**Remarks**
		Years	***Specialization***	***Years***	***Specialization***	
ITI	Mechanic Motor Vehicle/Mechanic Auto Electrical and Electronics/Diesel Mechanic	8	Two/Four Wheeler service	1	Two/Four wheeler service	NA
ITI	Mechanic Motor Vehicle/Mechanic Auto Electrical and Electronics/Diesel Mechanic	9	Two/ four wheeler service	0	Two/four wheeler service	NA
Diploma	Automobile Engineering/ Mechanical Engineering	7	Two/Four Wheeler Service	1	Two/Four Wheeler Service	NA
Diploma	Automobile Engineering/ Mechanical Engineering	8	Two/Four Wheeler Service	0	Two/Four Wheeler Service	NA
BE/ B. Tech	Automobile Engineering/ Mechanical Engineering	6	Two/Four Wheeler Service	1	Two/Four Wheeler Service	NA

Assessor Certification	
Domain Certification	**Platform Certification**
Certified for Job Role: "Automotive Service Quality Controller Level 6" "ASC/Q1427, v1.0", Minimum accepted score is 80%	Recommended that the Assessor is certified for the Job Role: "Assessor" "MEP/Q2701, v1.0"

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
PwD	Persons with Disability
OEM	Original Equipment Manufacturer