

NSQF QUALIFICATION FILE

Approved in 2nd NSQC, Meeting Date: 22nd Sept 2020

Rationalized in 24th NSQC, Meeting Date: 17th Nov 2022

**Qualification Code
2022/AUT/ASDC/06571**

CONTACT DETAILS OF THE BODY SUBMITTING THE QUALIFICATION FILE

Name and address of submitting body:

Automotive Skills Development Council

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

Name and contact details of individual dealing with the submission

Name: Mr. Arindam Lahiri

Position in the organisation: CEO

Address if different from above: Same as above

Tel number(s): 011-42599800

E-mail address: ceo@asdc.org.in

List of documents submitted in support of the Qualifications File

1. Qualification Pack:- ASC/Q1411
2. Documents related to QP Development (Refer to folder “Common Files”)
 - (i) RFP for QP Development
 - (ii) Supporting Document from GC meetings
 - (iii) Labour Market Survey
 - (iv) About the sector
 - (v) Occupational Map
 - (vi) List of Companies participating in QP Development Process
 - (vii) QRC Summary Sheet
 - (viii) Model Curriculum

- **SUMMARY**

NSQF QUALIFICATION FILE

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1	Qualification Title: Two Wheeler Service Technician
2	Qualification Code, if any: ASC/Q1411
3	NCO code and occupation: NCO-2015/7231.0501 Technical Service & Repair
4	Nature and purpose of the qualification (Please specify whether qualification is short term or long term): Assist the two wheeler service lead technician in diagnosing the faults and performing routine service, maintenance, repair and replacement of faulty components along with record maintenance. Short-term
5	Body/bodies which will award the qualification: Automotive Skills Development Council
6	Body which will accredit providers to offer courses leading to the qualification: Automotive Skills Development Council
7	Whether accreditation/affiliation norms are already in place or not , if applicable (if yes, attach a copy) : Yes
8	Occupation(s) to which the qualification gives access: Technical Service and Repair
9	Job description of the occupation: A two-wheeler service technician is responsible for the repairing and routine servicing & maintenance (including electrical and mechanical aggregates) of two-wheeler vehicles.
10	Licensing requirements: Driving License
11	Statutory and Regulatory requirement of the relevant sector (documentary evidence to be provided) : N/A
12	Level of the qualification in the NSQF: Level 4
13	Anticipated volume of training/learning required to complete the qualification: 480 Hours
14	Indicative list of training tools required to deliver this qualification: Laptop, white board marker, projector, hydraulic ramp, manual operated hydraulic ramp, vehicle washer, spark plug cleaner & tester, PUC monitor, waste oil collection trolley, moisture separator, pneumatic tools, screw driver, wrenches, battery tester, oil dispenser, lubricating machine, garage air compressors etc. MS Office / Open office Protective Equipment: Safety shoes, safety gloves, safety helmet, safety jacket, safety mask Safety Equipment: Fire Drill Accessories, first aid kit, different types of fire extinguisher.
15	Entry requirements and/or recommendations and minimum age:

NSQF QUALIFICATION FILE

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	10th Class + 1 year ITI OR 10th Class pass with 2 years relevant experience OR 11th Class Pass OR Certificate-NSQF (Two Wheeler Service Assistant Level 3) with 2 Years of experience, 18 years		
16	Progression from the qualification (Please show Professional and academic progression) : Two Wheeler Service Lead Technician		
17	Arrangements for the Recognition of Prior learning (RPL) : RPL will be based on the same approved Qualification Pack and Assessment Criteria mentioned in the Qualification Pack by Automotive Skills Development Council		
18	International comparability where known (research evidence to be provided) : No		
19	Date of planned review of the qualification: 22 st September, 2025		
21	Formal structure of the qualification Mandatory components		
(i)	Title of component and identification code/NOSs/Learning outcomes	Estimated size (learning hours)	Level
1	Introduction to Role of an Two Wheeler Service Technician	5	4
2	ASC/N9801- Organize work and resources (Service)	55	4
3	DGT/VSQ/N0102 - Employability Skills (60 hours)	60	4
4	ASC/N1420 – Perform routine servicing and minor repairs	360	4
	Sub Total (A)	480	

SECTION 1 ASSESSMENT

NSQF QUALIFICATION FILE

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1	<p>Body/Bodies which will carry out assessment: Automotive Skills Development Council. Proposed Body/Bodies which will carry out assessment:</p> <table border="1" data-bbox="343 481 1353 931"><thead><tr><th>S. No.</th><th>Assessment Agency Name</th></tr></thead><tbody><tr><td>1</td><td>Eduvantage Pvt. Ltd.</td></tr><tr><td>2</td><td>Prima Competencies Pvt. Ltd.</td></tr><tr><td>3</td><td>Trendsetters Skill Assessors Pvt. Ltd.</td></tr><tr><td>4</td><td>VR Skill & HR Solutions</td></tr><tr><td>5</td><td>SP Institute of Workforce Development Private Limited</td></tr><tr><td>6</td><td>Induslynk training services pvt ltd</td></tr><tr><td>7</td><td>Kumar Agromeditech India Pvt. Ltd.</td></tr><tr><td>8</td><td>Ace Assessments Pvt. Ltd.</td></tr><tr><td>9</td><td>Greenarrows Safety Management (P) Ltd.</td></tr><tr><td>10</td><td>TCS iON</td></tr></tbody></table>	S. No.	Assessment Agency Name	1	Eduvantage Pvt. Ltd.	2	Prima Competencies Pvt. Ltd.	3	Trendsetters Skill Assessors Pvt. Ltd.	4	VR Skill & HR Solutions	5	SP Institute of Workforce Development Private Limited	6	Induslynk training services pvt ltd	7	Kumar Agromeditech India Pvt. Ltd.	8	Ace Assessments Pvt. Ltd.	9	Greenarrows Safety Management (P) Ltd.	10	TCS iON
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2	<p>How will RPL assessment be managed and who will carry it out? The RPL assessment will be managed by selected assessment partners from the applications received</p>																						
3	<p>Describe the overall assessment strategy and specific arrangements which have been put in place to ensure that assessment is always valid, reliable and fair and show that these are in line with the requirements of the NSQF.</p> <p>The emphasis is on practical demonstration of skills and knowledge based on the performance criteria. The assessment papers are developed by Subject Matter Experts (SME) available with the Assessment Agency as per the performance and assessment criteria mentioned in the Qualification Pack. The assessment papers are also checked for the various outcome-based parameters such as quality, time taken, precision, tools & equipment requirement etc. The assessment results are backed by evidences collected by assessors.</p> <ol style="list-style-type: none">1. The assessor needs to collect a copy of the attendance for the training done under the scheme. The attendance sheets are signed and stamped by the In-charge / Head of the Training Centre.2. The assessor needs to verify the authenticity of the candidates by checking the photo ID card issued by the institute as well as any one Photo ID card issued by the Central/Government. The same needs to be mentioned in the attendance sheet. In case of suspicion, the																						

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	<p>assessor should authenticate and cross verify trainee's credentials in the enrolment form.</p> <ol style="list-style-type: none">3. The assessor needs to punch the trainee's roll number on all the test pieces.4. The assessor can take a photograph of all the students along with the assessor standing in the middle and with the center name/banner at the back as evidence.5. The assessor also needs to carry a photo IDcard. <p>The assessment agencies are instructed to hire assessors with integrity, reliability and fairness. Each assessor shall sign a document with its assessment agency by which they commit themselves to comply with the rules of confidentiality and conflict of interest, independence from commercial and other interests that would compromise impartiality of the assessments.</p>
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Please attach most relevant and recent documents giving further information about assessment and/or RPL.

Give the titles and other relevant details of the document(s) here. Include page references showing where to find the relevant information.

ASSESSMENT EVIDENCE

Complete a grid for each component as listed in “Formal structure of the qualification” in the Summary.

NOTE: this grid can be replaced by any part of the qualification documentation which shows the same information – i.e. Learning Outcomes to be assessed, assessment criteria and the means of assessment.

NSQF QUALIFICATION FILE

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24. Assessment evidences

Title of Component: Two Wheeler Service Technician

CRITERIA FOR ASSESSMENT OF TRAINEES

Job Role Two Wheeler Service Technician

Qualification Pack ASC/Q1411

Sector Skill Council Automotive Skills Development Council

Guidelines for Assessment

1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Skills Practical for each PC.
2. The assessment for the theory part will be based on knowledge bank of questions created by the SSC.
3. Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training centre (as per assessment criteria below).
4. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/ training centre based on these criteria.
5. In case of successfully passing only certain number of NOSs, the trainee is eligible to take subsequent assessment on the balance NOS's to pass the Qualification Pack.
6. In case of unsuccessful completion, the trainee may seek reassessment on the Qualification Pack

Recommended Pass % : 70

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
ASC/N9801: Organize work and resources (Service)				
<i>Maintain safe and secure working environment</i>	8	4	-	3
PC1. organise work as per organisation's current health, safety and security policies and procedures	-	2	-	1

NSQF QUALIFICATION FILE

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PC2. report any identified breaches in health, safety, and security policies and procedures to the designated person	3	1	-	-
PC3. identify the risks and hazards associated with work activities, their causes and prevention	5	1	-	2
<i>Perform work as per quality standards</i>	12	8	-	6
PC4. ensure work area is clean and tidy	4	2	-	-
PC5. ensure that work is accomplished as per the requirements within the specified timeline	6	4	-	2
PC6. ensure team goals are given preference over individual goals	2	2	-	4
<i>Health and hygiene</i>	12	8	-	5
PC7. sanitize workstation and equipment regularly	2	2	-	2
PC8. clean hands with soap, alcohol-based sanitizer regularly	2	1	-	-
PC9. avoid contact with ill people and self-isolate in a similar situation	2	1	-	-
PC10. wear and dispose PPEs regularly and appropriately	2	2	-	1
PC11. report advanced hygiene and sanitation issues to appropriate authority	2	2	-	2
PC12. follow stress and anxiety management techniques	2	-	-	-
<i>Material/energy conservation practices</i>	10	4	-	3
PC13. identify ways to optimise usage of material in various tasks/activities/processes	2	-	-	1
PC14. use resources, including water, in a responsible manner	2	-	-	-
PC15. check for spills/leakages in various tasks/activities/processes	-	1	-	-
PC16. plug spills/leakages and escalate to appropriate authority if unable to rectify	-	1	-	1

NSQF QUALIFICATION FILE

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Rationalized in 24th NSQC, Meeting Date: 17th Nov 2022

PC17. carry out routine cleaning of tools, machines and equipment	2	-	-	-
PC18. check if the equipment/machine is functioning normally before commencing work and rectify wherever required	-	1	-	1
PC19. report malfunctioning (fumes/sparks/emission/vibration/noise) and lapse in maintenance of equipment	2	1	-	-
PC20. ensure electrical equipment and appliances are properly connected and turned off when not in use	2	-	-	-
<i>Effective waste management practices</i>	8	6	-	3
PC21. identify recyclable and non-recyclable, and hazardous waste generated	2	-	-	1
PC22. segregate waste into different categories	-	2	-	-
PC23. dispose non-recyclable waste appropriately	2	2	-	1
PC24. deposit recyclable and reusable material at identified location	2	1	-	-
PC25. follow processes specified for disposal of hazardous waste	2	1	-	1
NOS Total	50	30	-	20
ASC/N9802: Interact effectively with colleagues, customers and others				
<i>Communicate effectively with colleagues, customers and others</i>	36	11	-	14
PC1. maintain clear communication with colleagues, customers and others, wherever needed, through all means i.e. face-to-face, telephonic or written	8	-	-	4
PC2. adjust communication styles to reflect gender and persons with disability (PwD) sensitivity	8	-	-	-
PC3. work in a way that shows respect for colleagues and others	7	4	-	3
PC4. follow the organisation's policies and procedures while working in a team	7	4	-	3

NSQF QUALIFICATION FILE

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PC5. respect personal space of colleagues and customers	6	3	-	4
<i>Interact with supervisor or superior</i>	14	19	-	6
PC6. identify work requirements by receiving instructions from reporting supervisor	7	4	-	-
PC7. escalate problems to supervisors that cannot be handled including repairs and maintenance of machine	-	5	-	3
PC8. report the completed work	7	5	-	-
PC9. rectify errors as per feedback	-	5	-	3
NOS Total	50	30	-	20
ASC/N1420: Perform routine servicing and minor repairs				
<i>Prepare for routine service, maintenance and minor repairs</i>	12	20	-	7
PC1. review the job card and understand the work to be carried out	2	2	-	-
PC2. identify the auto component manufacturer specifications related to various components/aggregates in the vehicle	2	3	-	1
PC3. inspect the components requiring replacement due to continuous wear and tear such as chain and chain sprocket, clutch cable, brake linings and pads etc.	-	5	-	1
PC4. inspect the machining/repair done by outside source/local machining garages	-	2	-	1
PC5. test ride the two wheeler vehicle to assess the requirement of calibration, other adjustments and repairs if any, in the electrical/mechanical aggregates	2	2	-	-
PC6. use checklist for confirming routine servicing tasks and coordinate with superior for non-routine service or repair, if any	2	2	-	2
PC7. collect workshop tools/equipment, spare parts and appropriate grade of lubricants, oils and grease required for the job	2	2	-	2

NSQF QUALIFICATION FILE

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PC8. report the malfunctions if any, in the tools/equipment to the person concerned for rectification	2	2	-	-
<i>Perform routine service, maintenance and minor repairs</i>	10	21	-	9
PC9. take precautions to avoid damage to the vehicle and its components while working on various aggregates	2	2	-	-
PC10. check lubricants/fluids level and refill/top-up, if required	2	2	-	1
PC11. use computer-based applications relevant to fault finding in the electronic system of engine, brake and other aggregates	2	2	-	1
PC12. check for any repair requirements observed in the components/aggregates and systems (such as engine, gearbox etc.) while repairing/overhauling of braking or suspension systems and report the same to supervisor/service advisor for further inspection by other specialists	-	3	-	2
PC13. remove, replace, and repair relevant parts in various aggregate of the vehicle as per OEM Standard Operating Procedure	2	5	-	3
PC14. clean and condition dismantled parts/components, prior to reassembly	-	3	-	1
PC15. ensure completeness of tasks assigned before releasing the vehicle for the next procedure	-	2	-	-
PC16. maintain the documentation related to inspection, servicing, maintenance and repair of the vehicle	2	2	-	1
<i>Perform post service/repair activities</i>	8	9	-	4
PC17. check the performance of vehicle/aggregate post repair and report to supervisor/service advisor if further inspection is required by another specialist	2	2	-	-
PC18. dispose off materials such as waste oil, scrap of failed parts/aggregates, as per organization's policies	2	3	-	2

NSQF QUALIFICATION FILE

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PC19. return leftover consumable/parts, tools/equipment, and report if any malfunctions are observed to the person concerned	2	2	-	-
PC20. perform scheduled checks, calibration and timely repairs for workshop tools, equipment and workstations	2	2	-	2
NOS Total	30	50	-	20

Employability Skills (30 hours)

S. No	Module Name	Assessment Marks
1.	Introduction to Employability Skills	2
2.	Constitutional values - Citizenship	2
3.	Becoming a Professional in the 21st Century	4
4.	Basic English Skills	5
5.	Communication Skills	2
6.	Diversity & Inclusion	2
7.	Financial and Legal Literacy	7
8.	Essential Digital Skills	10
9.	Entrepreneurship	8
10.	Customer Service	4
11.	Getting ready for Apprenticeship & Jobs	4
	Total	50

NSQF QUALIFICATION FILE

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Outcomes to be assessed/NOSs to be assessed	Assessment criteria for the outcome
Provided in the above section	
Means of assessment 1 <ol style="list-style-type: none">1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Skills Practical for each PC.2. The assessment for the theory part will be based on knowledge bank of questions created by the SSC.3. Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training centre (as per assessment criteria below.)4. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training centre based on these criteria.	
Means of assessment 2 Add boxes as required.	
Pass/Fail <ol style="list-style-type: none">1. To pass the Qualification Pack, every trainee should score a minimum of 70% in every NOS.2. In case of successfully passing only certain number of NOS's, the trainee is eligible to take subsequent assessment on the balance NOS's to pass the Qualification Pack.	

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SECTION 2

EVIDENCE OF LEVEL

Title/Name of qualification/component: Two Wheeler Service Technician		QP Code:- ASC/Q1411	Level: 4
NSQF Domain	Outcomes of the Qualification/Component	How the outcomes relates to the NSQF level descriptors	NSQF Level
Process	Assist the senior technician in diagnosing the faults and carry out routine service / minor repairs of mechanical / electrical aggregates of the vehicle	Theoretical & Practical skill required for assisting in repairing/servicing 2-wheeler vehicles or performing the task individually. Since the individual is required to take instructions from supervisors, hence this is level 4.	4
Professional knowledge	Knowledge related to conducting test drive to identify problems and repair the vehicle in a scheduled manner	Factual and theoretical knowledge in the field of repairing/servicing of 2-wheeler vehicles. No deeper knowledge or skills are required for this individual, hence this is level 4.	4
Professional skill	<ul style="list-style-type: none">• Identify the work requirement to schedule timely completion accordingly• Demonstrate conducting the test drive to identify the fault• Apply the knowledge about the various systems / components / aggregates in diagnosing and repairing the faults• Follow the steps of inspection, diagnosis and repair as per standard operating procedures	Range of cognitive and practical skill required for the repairing/servicing of 2-wheeler vehicles. Hence this is level 4.	4

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Title/Name of qualification/component: Two Wheeler Service Technician QP Code:- ASC/Q1411 Level: 4			
NSQF Domain	Outcomes of the Qualification/Component	How the outcomes relates to the NSQF level descriptors	NSQF Level
	<ul style="list-style-type: none">• Demonstrate the process of performing routine service of the vehicle		
Core skill	Effective skill in writing, reading and oral communication (listening and speaking skills) with required clarity	Skill to communicate written or oral with required clarity, but not to manage/supervise others. Hence this is level 4.	4
Responsibility	Responsible for completing the assigned task, effective team working, safety of self and in workplace	Accountable for own work and learning in the domain of repairing/servicing of 2-wheeler vehicles and hence this is level 4.	4

NSQF QUALIFICATION FILE

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SECTION 3

EVIDENCE OF NEED

1	<p>What evidence is there that the qualification is needed? What is the estimated uptake of this qualification and what is the basis of this estimate?</p> <p>Feedback from industry was collected with respect to roles for which qualification pack development was to be prioritized.</p>
2	<p>What is the estimated uptake of this qualification and what is the basis of this estimate?</p> <p>Skills Gap analysis reports for industry demand Training duration w.r.t current and potential capacity envisaged for potential supply</p>
2	<p>Recommendation from the concerned Line Ministry of the Government/Regulatory Body. To be supported by documentary evidences</p> <p>Yes</p>
3	<p>What steps were taken to ensure that the qualification(s) does (do) not duplicate already existing or planned qualifications in the NSQF? Give justification for presenting a duplicate qualification</p> <p>NSDC list of Approved and Under-Development QPs was checked prior to commencement the work.</p>
4	<p>What arrangements are in place to monitor and review the qualification(s)? What data will be used and at what point will the qualification(s) be revised or updated? Specify the review process here</p> <ul style="list-style-type: none">● Monitoring of results of assessments● Employer feedback will be sought

Please attach most relevant and recent documents giving further information about any of the topics above.

Give the titles and other relevant details of the document(s) here. Include page references showing where to find the relevant information.

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SECTION 4

EVIDENCE OF PROGRESSION

1	<p>What steps have been taken in the design of this or other qualifications to ensure that there is a clear path to other qualifications in this sector?</p> <ol style="list-style-type: none">1. Endorsed and accepted by the Industry players2. Formal recognition from the Industry players3. Horizontal and vertical mobility options are available
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Give the titles and other relevant details of the document(s) here. Include page references showing where to find the relevant information.

1. QP ASC/Q1411
2. MC ASC/Q1401