

Model Curriculum

Auto /E-Rickshaw Driver & Assistant Service Technician

SECTOR: AUTOMOTIVE
SUB-SECTOR: ROAD TRANSPORTATION
OCCUPATION: DRIVING
REF ID: ASC/Q9719, V1.0
NSQF LEVEL: 4



Certificate

CURRICULUM COMPLIANCE TO QUALIFICATION PACK – NATIONAL OCCUPATIONAL STANDARDS

is hereby issued by the

AUTOMOTIVE SKILLS DEVELOPMENT COUNCIL

for

MODEL CURRICULUM

Complying to National Occupational Standards of Job Role/Qualification Pack:

Auto/E-Rickshaw Driver & Assistant Service Technician QP No. ASC/Q 9719 NSQF Level 4

Date of issuance: April 9th, 2016

Valid up to*: April 10th, 2018

*Valid up to the next review date of the Qualification Pack or the
"Valid up to" date mentioned above (whichever is earlier)


Authorised Signatory
(Automotive Skills Development Council)

TABLE OF CONTENTS

1. Curriculum	01
2. Trainer Prerequisites	06
3. Annexure: Assessment Criteria	07

Auto/E-Rickshaw Driver & Service Technician

CURRICULUM / SYLLABUS

This program is aimed at training candidates for the job of a “Auto/E-Rickshaw Driver & Assistant Service Technician”, in the “Automotive” Sector/Industry and aims at building the following key competencies amongst the learner

Program Name	Auto/E-Rickshaw Driver & Service Technician		
Qualification Pack Code	ASC/Q9719		
Version No.	1.0	Version Update on	07-03-2017
Pre-requisites to Training	8th Standard passed		
Training Outcomes	<p>After completing this programme, participants will be able to:</p> <ul style="list-style-type: none"> • Gain Knowledge of automotive industry Vehicle models and its technical features, service processes of automotive workshop, E-Rickshaws and Auto Threewheeler. • Assess and ensure the road worthiness of the vehicle: CMVR guidelines, Ensure all basic technical checks, collection of fare from the customer based on meter reading • Drop the customer safely using the quickest route follow standard driving practices and traffic regulations. • Become well versed with HSE and security related guidelines Follow safety standards while driving, Ensure cleanliness of the vehicle • Assist in Service maintenance and repair of the vehicle: Assist n routine servicing, maintenance and repair of the vehicle. • Use recourses appropriately and efficiently : Manage time, materials and manpower efficiently • Work effectively in a team : follow the organisations policies and procedures for working with colleagues • Become well versed with environment, health, safety and security at workshop: monitor the working environment and make sure it meets health, safety and security guidelines. 		

Sr. No.	Module	Key Learning Outcomes	Equipment Required
		meter reading <ul style="list-style-type: none"> Comply with all related rules, regulation and practices for handling general public issues 	manuals.
4	Assist in Service Maintenance and Repair of the Vehicle Theory Durations (60:00) Practical Duration (100:00) Corresponding NOS Code ASC/N1401	At the end of the module the learner will be able to <ul style="list-style-type: none"> Understand the auto component manufacturer specifications relating to each system component and aggregates of a vehicle Operate various tool and equipment required for vehicle diagnostics, following standard operating procedures Identify the various component of the vehicle and can dismantle and assemble the aggregates. Carry out routine service and maintenance requirement of the vehicle Test Drive a relevant vehicle safely and diagnose or trouble shoot the vehicle for any fault Understand the basic technology used in and functioning of various components and aggregates of the vehicle Prepare the vehicle checklist and fill the job card after repairs. 	White board/marker, computer , projector, image recognition tools, E-rickshaw, three wheeler auto, lever type grease gun, Chisels, oil can-wesco type centre punches, hammer ball peen, single arm torque wrenches, cross wheel spanner, vernier callipers, Micrometer, Digital tachometer, Hacksaw frame with blade, tyre pressure gauge, Hydrometer, Plastic hammer, spark plug sockets, magnetic pickup tool, hydraulic jacks, air compressor and hoses , tyre inflator, battery charger, screw extractor, brake bleeder, tyre changer, pneumatic tools, diesel and petrol engine cut section, typical engine and body parts, aggregates and assembly of clutch and gear box, propeller shaft, differential, starter motor, alternator, starting system, hydraulic and motor pump. wall charts on various engine systems, tool board, diagnostic equipment , first aid kit, personal protective equipment, fire extinguisher, ring and double ended spanner sets, screw driver sets, plier sets , spark plug spanner , compression gauge , feeler gage, and work benches
5	Plan and Organize work to meet expected outcomes Theory Durations (15:00) Practical Duration	At the end of the module the learner will be able to <ul style="list-style-type: none"> Perform the job within given time and set quality standards/ work schedule Identify and manage resource and use it efficiently and effectively Perform in accordance with the organizational policies and procedures Apply best practices to keep work place 	White board , marker, computer LCD's projector, screen, case studies

Sr. No.	Module	Key Learning Outcomes	Equipment Required
	(20:00) Corresponding NOS Code ASC/N0001	clean and orderly	
6	Work effectively in a team Theory Durations (20:00) Practical Duration (20:00) Corresponding NOS Code ASC/N0002	At the end of the module the learner will be able to <ul style="list-style-type: none"> • Explain the different types of information that colleagues might need and the importance of providing this information when required • Understand the importance of helping colleagues with problems in order to meet quality and time standard as a team. • Gain knowledge on the resources shared with other members of the team based on priorities • Maintain clear communications with colleagues either telephonic or written. • Identify problems in working with colleagues and take the initiative to solve these problems. • Use proper etiquettes at workplace. 	Laptop, white board marker projector , stationery ,case studies- audio/ videos training chart
7	Maintain a Health safe and secure working environment (Workshop) Theory Durations (15:00) Practical Duration (25:00) Corresponding NOS Code ASC/N0003	At the end of the module the learner will be able to <ul style="list-style-type: none"> • Explain different types of breaches in health safety and security • Follow the safety health and environment related practices' • Complete all health & safety records and ensure that procedure are well defined • Use best practices to remove potential hazard from the workplace and prevent accidents. • Apply appropriate strategies to deal with emergencies at work place 	<ul style="list-style-type: none"> • Laptop , white board, marker, projector & stationery, screen • chemical resistance gloves, safety , goggles, earplug, fire extinguisher, fire and safety signs, SOP charts on safety norms and drills charts of Does and Don'ts in work area • First aid box
8	Practice HES and Security related guidelines (Driving) Theory Durations (15:00) Practical Duration (25:00)	At the end of the module the learner will be able to <ul style="list-style-type: none"> • Explain organisational guidelines related to safety and emergency issues while driving. • Identify potential sources of safety while driving. • Keep the vehicle clean &hygienic • Dispose waste safely as per environmental norms. 	<ul style="list-style-type: none"> • Laptop , white board, marker, projector & stationery, screen • chemical resistance gloves, safety , goggles, earplug, fire extinguisher, fire and safety signs, SOP charts on safety norms and drills charts of Does and Don'ts in work area

Sr. No.	Module	Key Learning Outcomes	Equipment Required
	Corresponding NOS Code ASC/N0012		
	Total Duration Theory Duration 200.00 Practical Duration 300.00	Unique Equipment Required: White board/marker, computer , projector, image recognition tools, E-rickshaw, three wheeler auto, lever type, grease gun, Chisel, oil can-wesco type centre punches, hammer ball peen, single arm torque wrenches, cross wheel spanner, verniercallipers, Micrometer,Digital multimeter, Hacksaw frame with blade, tyre pressure gauge, Hydrometer, Plastic hammer, spark plug sockets, magnetic pickup tool, hydraulic jacks, air compressor and hoses , tyre inflator, battery charger, screw extractor, brake bleeder, tyre changer, pneumatic tools, diesel and petrol engine cut section, typical engine and body parts, aggregates and assembly of clutch and gear box, propeller shaft, differential, starter motor, alternator, starring system, hydraulic and motor pump. wall charts on various engine systems, tool board, diagnostic equipment , first aid kit, personal protective equipment, fire extinguisher, ring and double ended spanner sets, screw driver sets, plier sets , spark plug spanner , compression gauge , digital techno metre, feeler gage, work benches chemical resistance gloves, safety , goggles, earplug, fire extinguisher, fire and safety signs, SOP charts on safety norms and drills charts of Does and Don'ts in work area	

Grand Total Course Duration: **500Hours, 0 Minutes**

(This syllabus/ curriculum has been approved by [AutomotiveSkill Council of India](#))

Trainer Prerequisites for Job role: “Auto/E-Rickshaw Driver & Assistant Service Technician” mapped to Qualification Pack: “ASC/Q9719, v1.0”

Sr. No.	Area	Details
1	Description	To deliver accredited training service, mapping to the curriculum detailed above, in accordance with the Qualification Pack “ASC/Q9719”.
2	Personal Attributes	<p>Aptitude for conducting training, and pre/ post work to ensure competent, employable candidates at the end of the training.</p> <ul style="list-style-type: none"> • Strong communication skills, interpersonal skills, ability to work as part of a team; a passion for quality and for developing others; well-organised and focused. • Eager to learn and keep oneself abreast of the latest developments and newer technologies used in the various systems of the vehicle and its aggregates is highly desirable. • Should be able to demonstrate the usage of workshop equipment, instruments, special instruments and tools. • Should have sharp diagnostic abilities for identifying reasons of problems in vehicles and troubleshoot. • Should be hands-on with servicing of vehicles to provide experiential training.
3	Minimum Educational Qualifications	10th std/ITI/Graduate/ASDC certified technician/ Diploma /Engineer
4a	Domain Certification	Certified for job roles “Auto/E-Rickshaw Driver & Assistant Service Technician” mapped to QP ASC/Q9719. Minimum accepted qualifying score-80% as per ASDC Guidelines
4b	Platform Certification	Recommended that the trainer is certified for the job roles “Trainer” mapped to the Qualification Pack “SSC/1402” Minimum accepted qualifying score-80 % as per ASDC Guidelines
5	Experience	<ul style="list-style-type: none"> • 5 year of driving & ASDC certified trainer • Valid Driving License Required • Minimum 3 years of experience in Automotive Service Industry for ITI • Minimum 2 years of experience in Automotive Service Industry for Diploma/ Engineer (mechanical engineering) • Working experience on latest tools and equipments, used for vehicle servicing

Annexure: Assessment Criteria

Assessment Criteria	
Job Role	Auto/E-Rickshaw
Qualification Pack	ASC/Q9719, v1.0
Sector Skill Council	AUTOMOTIVE

Sr. No.	Guidelines for Assessment
1	Assessment to be conducted by ASDC as per competency output defined in the NOS/QP and the assessment criteria provided in the NOS/QP
2	Assessment to be carried out by a third party Assessment Body duly affiliated to the SSC.
3	ASDC assessments will be comprehensive and cover all aspects of acquired knowledge, practical skills and also basic ability to communicate. Accordingly, evaluation process would include: <ul style="list-style-type: none"> i. Theory/Knowledge test ii. Practical demonstration test iii. Face to Face Viva
4	Theory/Knowledge assessment will be carried out on line through a link provided for each assessment that generates a random paper from a bank of questions available at the back end. - Exception to an online test in favour of Paper Test would be subject to nonavailability of requisite broadband and/or hardware. - On line test would be conducted in the presence of an ASDC assessor till web enabled proctoring is deployed.
5	ASDC assessor would be conducting Practical and Viva as per the criteria provided in the NOS/QP.
6	Cut off criteria for certification (Marks obtained in %):75%

	PC29.do not indulge in unnecessary talk with customer and specially avoid topics involving politics or communal issues				2
	PC30.to an out station customer do point out any landmark on the route				2
	PC31.stop the vehicle and the fare meter and help customers in de-boarding Safely taking special care in case of elderly and differently abled				2
	PC32.collect the fare based on the reading that is displayed on the meterorbasedon fare prior settled with customer. Fare may be collected in cash. Be sure to return balance				2
	PC33.charge to customer strictly as per fare calculations				2
	PC34.do not demand any tips but accept thankfully if the customer offers				2
	PC35.unload the luggage from the vehicle if any and hand it over to the passenger. Verify no valuables or belongings of the customer have been left in the vehicle				2
	PC36.wish the customer appropriately before parting				1
	PC37.conform to state specific traffic regulations				3
	PC38.give preference and right of road usage to children, elderly and differently abled. Comply with any related rules, regulations and practices for handling general public issues as well as show consideration towards stray animals				2
	All KA, KB for the NOS			30	
		Total	100	30	70
ASC/N1401 Assist in service, maintenance and repair of the vehicle	PC1.collect and safely handover personal belongings of customer like phone, pen, documents etc, at the time of taking a vehicle for servicing or repairs	100			4
	PC2.place the vehicle on a suitable platform, before the painting actually starts				4
	PC3.assist in organising the secure parking area and moving vehicles around as directed				4
	PC4.lift raw materials, finished products, and packed items, manually or using hoists				4
	PC5.understand the autocomponent manufacturer specifications related to the various components/ aggregates in the vehicle				4
	PC6.ensure that service, maintenance and repair activities are carried out on the vehicle without causing damage to any other other aggregate/ component				4

	PC7.run errands at the direction of the senior technician such as gettingfetchingparts, tools, gauges, instruments, fixtures, workshop supplies, taking vehicles to dealerships etc.				3
	PC8.assist in performing service or repair of vehicles under supervision of senior technician				6
	PC9.dismantle aggregates like wheels,suspension system, steering column,brakingsystem,engine assembly etc.				10
	PC10.count and report serviced or repaired vehicles to determine if product orders are complete				3
	PC11.assist in maintaining and managing the workshop, tools, equipment and machinery in required conditions				4
	PC12.follow standard operating procedures specially vehicle service manuals for using workshop tools and equipments.				4
	PC13.ensure any malfunctions or repair requirements observed in vehicles (and beyond own scope of work) are reported to the concerned person				4
	PC14.ensure any malfunctions observed in tools and equipments, are reported to the concerned persons				4
	PC15.assist in fitting and balancing the replaced and refitted parts				4
	PC16.ensure that trainings organized by the OEM from time-to-time are attended and knowledge levels are upgraded (esp. in case of newly launched products, product refreshes)				4
	All KA, KB for the NOS			30	
		Total	100	30	70
ASC/N0001 Plan and organise work to meet expected outcomes	PC1.keep immediate work area clean and tidy	100			7
	PC2.treat confidential information as per the organisation's guidelines				8
	PC3.work in line with organisation's policies and procedures				8
	PC4.work within the limits of job role				8
	PC5.obtain guidance from appropriate people, where necessary				8
	PC6.ensure work meets the agreed requirements				7
	PC7.establish and agree on work requirements with appropriate people				9
	PC8.manage time, materials and cost effectively				8
	PC9. use resources efficiently with minimal wastage				7
	All KA, KB for the NOS			30	
		Total	100	30	70

related guidelines	PC3.follow company policy and rules to avoid safety, health and environmental problems				5	
	PC4.ensure cleanliness of vehicle				5	
	PC5.escalate issues related to cleanliness and hygiene issues to concern department				5	
	PC6.escalate issues related to hazardous material (if not reported in case of goods transport) to concerned authority – internal and external				5	
	PC7.take immediate and effective action to limit the danger or damage, without increasing the danger or threat to yourself or others				5	
	PC8.follow instructions or guidelines for limiting danger or damage				5	
	PC9.escalate the issue immediately e.g. to police control room if you cannot deal effectively with the danger				5	
	PC10.give clear information or instructions to others to allow them to take appropriate action				5	
	PC11.record and report details of the danger in line with operator guidelines/manual				5	
	PC12.report any difficulties you have keeping to your organization’s health and safety instructions or guidelines, giving full and accurate details				5	
	PC13.check the exhaust as per the recommended guideline and ensure the vehicle is meeting the emission norms. In case not get the vehicle re-tuned/ adjusted				5	
	PC14.get the waste from routine cleaning, changed spare parts etc. disposed off as per environmental norms				5	
		All KA, KB for the NOS			30	
			Total	100	30	70
ASC/N0021 Maintain 5S at the work premises	PC1.follow the sorting process and check that the tools, fixtures & jigs that are lying on workstations are the ones in use and un-necessary items are not cluttering the workbenches or work surfaces	100			3	
	PC2.ensure segregation of waste in hazardous/ non Hazardous waste as per the sorting work instructions				3	
	PC3.follow the technique of waste disposal and waste storage in the proper bins as per SOP				3	
	PC4.segregate the items which are labelled as red tag items for the process area and keep them in the correct places				3	

PC5.sort the tools/ equipment/ fasteners/ spare parts as per specifications/ utility into proper trays, cabinets, lockers as mentioned in the 5S guidelines/ work instructions			3
PC6.ensure that areas of material storage areas are not overflowing			2
PC7.properly stack the various types of boxes and containers as per the size/ utility to avoid any fall of items/ breakage and also enable easy sorting when required			3
PC8.return the extra material and tools to the designated sections and make sure that no additional material/ tool is lying near the work area			3
PC9.follow the floor markings/ area markings used for demarcating the various sections in the plant as per the prescribed instructions and standards			3
PC10.follow the proper labelling mechanism of instruments/ boxes/ containers and maintaining reference files/ documents with the codes and the lists			3
PC11.check that the items in the respective areas have been identified as broken or damaged			3
PC12.follow the given instructions and check for labelling of fluids, oils. lubricants, solvents, chemicals etc. and proper storage of the same to avoid spillage, leakage, fire etc.			3
PC13.make sure that all material and tools are stored in the designated places and in the manner indicated in the 5S instructions			3
PC14.check whether safety glasses are clean and in good condition			2
PC15.keep all outside surfaces of recycling containers are clean			2
PC16.ensure that the area has floors swept machinery clean and generally clean. In case of cleaning, ensure that proper displays are maintained on the floor which indicate potential safety hazards			3
PC17.check whether all hoses, cabling & wires are clean, in good condition and clamped to avoid any mishap or mix up			3
PC18.ensure workbenches and work surfaces are clean and in good condition			2
PC19.follow the cleaning schedule for the lighting system to ensure proper illumination			3
PC20.store the cleaning material and equipment in the correct location and in good condition			3

	PC21.ensure self-cleanliness - clean uniform, clean shoes, clean gloves, clean helmets, personal hygiene				3
	PC22.follow the daily cleaning standards and schedules to create a clean working environment				3
	PC23.attend all training programs for employees on 5 S				3
	PC24.support the team during the audit of 5 S				3
	PC25.participate actively in employee work groups on 5S and encourage team members for active participation				4
	PC26.follow the guidelines for What to do and What not to do to build sustainability in 5S as mentioned in the 5S check lists/ work instructions				3
	All KA, KB for the NOS			25	
		Total	100	25	75