







### **Model Curriculum**

**QP Name: Automotive Body Painting Technician** 

QP Code: ASC/Q3304

NSQF Level: 3

Automotive Skills Development Council E-113, GF Floor, Okhla Industrial Area, Phase – III ,New Delhi – 110020







### **Table of Contents**

Training Parameters	3
Program Overview	4
Training Outcomes	4
Compulsory Modules	4
Module 1: Introduction to the role of an Automotive Painting Technician	6
Module 2: Organize work and resources according to safety and conservation standards	7
Module 3: Support the painting technician in pre-treatment process	10
Module 4: Support the painting technician in painting and post-painting operations	13
Module 5-16: Employability NOS	13
Annexure	16
Trainer Requirements	16
Assessor Requirements	17
Assessment Strategy	18
References	19
Glossary	19
Acronyms and Abbreviations	20







### **Training Parameters**

Sector	Automotive	
Sub-Sector	Manufacturing	
Occupation	Painting & Surface Treatment Operation	
Country	India	
NSQF Level	3	
Aligned to NCO/ISCO/ISIC Code	NCO-2015/7132.0203	
Minimum Educational Qualification and Experience	10th Class + 2 years ITI OR 10th Class pass with 2 years of relevant experience. OR 11th Class Pass OR Certificate-NSQF (Automotive Painting Operator Level 2.5) with 2 years of relevant experience	
Pre-Requisite License or Training	NA	
Minimum Job Entry Age	18 years	
Last Reviewed On	29/07/2021	
Next Review Date	29/07/2026	
NSQC Approval Date	29/07/2021	
Model Curriculum Creation Date	29/07/2021	
Model Curriculum Valid Up to Date	29/07/2026	
Minimum Duration of the Course	450 Hours 00 Minutes	
Maximum Duration of the Course	450 Hours 00 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.

- Perform preparatory works such as identification of raw material, tools and equipment required for the pre-treatment and painting operations.
- Carry out body preparation and surface treatment processes on vehicle parts.
- Carry out sealing and painting operations on vehicle body parts.
- Work effectively and efficiently as per schedules and timelines.
- Implement safety practices.
- Optimize the use of resources to ensure less wastage and maximum conservation.

#### **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 Painting Technician	05:00	0:00			05:00
ASC/N9803 – Organize work and resources (Manufacturing) NOS Version No. – 1.0 NSQF Level – 3	25:00	30:00			55:00
Module 2: Organize work and resources according to safety and conservation standards	25:00	30:00			55:00
ASC/N3309 – Perform pre- treatment and surface preparation process NOS Version No. – 2.0 NSQF Level - 3	45:00	105:00			150:00
Module 3: Perform pre- treatment and surface preparation process	45:00	105:00			150:00
ASC/N3310 – Perform sealing, painting and post- painting operations	50:00	100:00	30:00		180:00







		1	I	1	
NOS Version No. – 2.0					
NSQF Level - 3					
Module 4:			20.00		
Perform sealing, painting and	50:00	100:00	30:00		180:00
post-painting operations					
DGT/VSQ/N0102 -					
Employability Skills (60 hours)	24.00	20.00			CO.00
NOS Version No. – 1.0	24:00	36:00			60:00
NSQF Level – 3					
Module 5: Introduction to					
Employability Skills	0.5:00	1:00			1.5:00
Module 6: Constitutional	0.5:00	1:00			1.5:00
values - Citizenship					
Module 7: Becoming a					
Professional in the 21st	1:00	1.5:00			2.5:00
Century					
Module 8: Basic English Skills	4:00	6:00			10:00
	4.00	0.00			10.00
Module 9: Career	1:00	1:00			2:00
Development & Goal Setting	1.00	1.00			2.00
Module 10: Communication					
Skills	2:00	3:00			5:00
Module 11: Diversity & Inclusion	1:00	1.5:00			2.5:00
Module 12: Financial and Legal	2:00	3:00			5:00
Literacy	2.00	3.00			3.00
Module 13: Essential Digital					40.00
Skills	4:00	6:00			10:00
Module 14: Entrepreneurship	2.00				
wiodule 14. Entrepreneurship	3:00	4:00			7:00
Module 15: Customer Service	2:00	3:00			5:00
		3.00			3.00
Module 16: Getting ready for	3:00	5:00			8:00
apprenticeship & Jobs	J.00	3.00			
Total Duration	149:00	271:00	30:00		450:00







### **Module Details**

### Module 1: Introduction to the role of an Automotive Painting Technician Bridge module

#### **Terminal Outcomes:**

• Discuss the role and responsibilities of an Automotive Painting Technician.

<b>Duration</b> : <05:00>	<b>Duration</b> : <00:00>
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul> <li>List the role and responsibilities of an Automotive Painting Technician.</li> <li>Discuss the job opportunities of an Automotive Painting Technician in an automobile industry.</li> <li>Explain about Indian automotive manufacturing market.</li> <li>List various automobile Original Equipment Manufacturers (OEMs) and different products/ models manufactured by them.</li> <li>Discuss the standards and procedures involved in the different processes of vehicle body painting.</li> </ul>	
Classroom Aids:	
Whiteboard, marker pen, projector	







### Module 2: Organize work and resources according to safety and conservation standards

#### Mapped to ASC/N9803, v1.0

#### **Terminal Outcomes:**

- Employ appropriate ways to maintain safe and secure working environment.
- Perform work as per the quality standards.
- Apply conservation practices at the workplace.

Duration: <25:00>	<b>Duration</b> : <30:00>
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
Theory – Rey Learning Outcomes	Fractical – Rey Learning Outcomes
<ul> <li>List the potential workplace related risks and hazards, their causes and preventions.</li> <li>Identify PPE to be used at workplace.</li> <li>Identify various warning signs used at the workplace.</li> <li>Describe appropriate strategies to deal with emergencies and accidents at the workplace.</li> <li>Outline the organizational structure to be</li> </ul>	<ul> <li>Apply appropriate safety practices to ensure safety of people at the workplace</li> <li>Display the correct way of wearing and removing PPE such as face masks, hand gloves, face shields, PPE suits, etc.</li> <li>Demonstrate the use of fire extinguisher.</li> <li>Apply basic first aid procedure in case of emergencies.</li> <li>Perform routine cleaning of tools,</li> </ul>
followed to report about health, safety and security breaches to the concerned authorities.  • Discuss the importance of keeping work area clean and tidy.	<ul> <li>equipment and machines.</li> <li>Employ various techniques for checking malfunctions in the equipment as per Standard Operating Procedure (SOP).</li> <li>Show how to sanitize and disinfect one's</li> </ul>
Discuss the significance of conforming to basic hygiene practices such as washing hands, using alcohol based hand sanitizers or soap.	<ul> <li>work area regularly.</li> <li>Demonstrate the correct way of washing hands using soap and water.</li> <li>Demonstrate the correct way of sanitizing</li> </ul>
<ul> <li>Discuss organizational hygiene and sanitation guidelines and ways of reporting breaches/gaps if any to the concerned authorities.</li> <li>Discuss the ways of dealing with stress</li> </ul>	<ul> <li>hands using alcohol-based hand rubs.</li> <li>Demonstrate how to evacuate the workplace in case of an emergency.</li> <li>Demonstrate sorting of materials, tools and equipment and spare parts after</li> </ul>
<ul> <li>and anxiety.</li> <li>Discuss how to complete the given work within the stipulated time period.</li> <li>Explain how to maintain a proper balance between team and individual goals.</li> <li>Explain 5S guidelines at workplace.</li> </ul>	<ul> <li>completion of work.</li> <li>Demonstrate the steps involved in storage of tools, equipment and material after completion of work.</li> <li>Perform basic checks to identify any spills and leaks and that need to be plugged</li> </ul>
<ul> <li>List the various materials used at the workplace.</li> <li>Explain organisational recommended procedure for storage of tools, equipment and material after completion of work.</li> </ul>	<ul> <li>/stopped.</li> <li>Demonstrate different disposal techniques depending upon types of waste.</li> <li>Employ different ways to check if equipment/machines are functioning as</li> </ul>
<ul> <li>Explain the ways to optimize usage of resources.</li> <li>Discuss various methods of waste</li> </ul>	per requirements and report malfunctioning, if observed.  • Employ ways for efficient utilization of

material and water.

management and its disposal.







- List the different categories of waste for the purpose of segregation
- Differentiate between recyclable and nonrecyclable waste
- State the importance of using appropriate colour dustbins for different types of waste.
- Discuss common practices for conserving electricity at workplace.
- Discuss the common sources of pollution and ways to minimize it.

#### **Classroom Aids:**

Whiteboard, marker pen, projector

#### **Tools, Equipment and Other Requirements**

- Housekeeping material: Cleaning agents, cleaning cloth, waste container, dust pan and brush set, liquid soap, hand towel, fire extinguisher
- Safety gears: Safety shoes, ear plug, goggles, gloves, helmet, first-aid kit







#### Module 3: Perform pre-treatment and surface preparation process

#### Mapped to ASC/N3309, v2.0

#### **Terminal Outcomes:**

- Identify tools and equipment required for pre-treatment process.
- Perform the steps to carry out pre-treatment process.

<b>Duration</b> : <45:00>	<b>Duration</b> : <105:00>		
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes		
<ul> <li>Describe pre-treatment and surfare preparation standards and procedure followed in the company.</li> <li>Discuss do's and don'ts of the preparation process.</li> <li>Discuss the information derived from the engineering drawing, work instruction and SOPs.</li> <li>List the tools, equipment, accessories and materials required during pre-treatment and surface preparation work.</li> <li>Describe the selection criteria of too equipment, accessories and materials required during pre-treatment and surface preparation work.</li> <li>Summarise the steps to be performed for the checking the tools, jigs, equipment accessories and materials before use.</li> </ul>	<ul> <li>Demonstrate the standard operating procedure to use tools, equipment, accessories and materials required during pre-treatment and surface preparation work.</li> <li>Show how to select the required tools, equipment, accessories and materials.</li> <li>Apply appropriate ways to check the tools, jigs, equipment, accessories and materials before use.</li> <li>Show how to identify loading points and locking points in the jig as per the job requirement.</li> <li>Perform the steps of lifting and placing the vehicle body parts on the designated place manually or by using lifting tools.</li> <li>Apply appropriate ways to check that vehicle body or parts are clean and free from wanted material or dust.</li> </ul>		
<ul> <li>Discuss the necessary precautions to avoid any hazard and accident pre-treatment and surface preparation work.</li> <li>Discuss ways of safe handling and use pre-treatment and surface preparation materials and solvents.</li> </ul>	nt components and parts of bath system, magnetic separator, oil separator, of phosphate sludge (for phosphate dip		
<ul> <li>Discuss the process of loading/unloadi and placing the vehicle body parts on t designated place as per the wo instructions.</li> </ul>	are in working condition as mentioned in SOP.		
checking the components and parts bath system, magnetic separator,	<ul> <li>conductivity is maintained as per norms.</li> <li>Show how to check the bath temperature and record it as per SOP/work instruction.</li> <li>Read the measurement gauges to monitor</li> </ul>		

• List steps to be performed for checking the quality of water.

phosphate dip process), heating system

(heat exchanger) of Phosphate solution

- Discuss the importance of monitoring the pressure difference across filter
- (cartridge/strainer).Demonstrate organizational specified

(cartridge/strainer).

the pressure difference across filter

Show how to clean/ replace the filter

 Demonstrate organizational specified procedure of all pre-treatment and surface preparation processes.

and spray nozzles.







- (cartridge/strainer) and correcting them as per the requirements.
- Describe process flow of pre-treatment and surface preparation processes i.e. prewash, hot water spray, pre-degreasing, degrease dip, Water rinse I spray & Water rinse II dip, Surface Conditioning, Phosphate dip, Water rinse III spray & Water rinse IV dip, ED Bath, Ultra Filtrate 1, 2 and 3, RCDM dip and Fresh DI spray process.
- Describe phosphate chemical transfer process from phosphate main tank to dump tank.
- Elaborate material Safety Data Sheet (MSDS) of bath and lab chemicals.
- Discuss the importance of maintaining bath pointage as per SOP/work instruction.
- State the importance of completing baking process within the stipulated time.
- Explain methods of inspecting the quality of parts after pre-treatment and surface preparation work.
- List the commonly occurring defects in the coated parts.
- Describe ways for checking the quality of phosphate coating and ED coating.
- Discuss ED coating parameters such as Dry Film Thickness (DFT), Gloss, Methyl Isobutyl Ketone (MIBK) rub test, etc. and their impact on output.
- List different methods for disposing off waste material and scrap.

- Show how to check the temperature of baking oven before starting of ED process.
- Apply appropriate ways to check the quality of phosphate coating and ED coating after phosphate process and ED process.
- Show how to remove any unwanted extra ED drops by using pressurised air as per SOP.
- Apply appropriate ways to check the ED coating parameters (Dry Film Thickness (DFT), Gloss, Methyl Isobutyl Ketone (MIBK) rub test, etc) and record data as per SOP.
- Perform steps to check that part is free from water break, dust and defects after final rinse.
- Demonstrate how to support the operator during unloading of the vehicle body or parts on skids for next process.
- Show how to dispose scrap or waste as per organisational guidelines.

#### Classroom Aids:

Whiteboard, marker pen, projector

#### **Tools, Equipment and Other Requirements**

- PPT's, teaching aids
- Pre-treatment line consisting of degreasing phosphating & passivation facility, all type of chemicals for pre-treatment
- R.O & D.M Water
- Painting booth (4'x6'x10') approx with water screen facility, Paint Mixing Room, Inspection Booth With Sufficient Light (700 Lux)
- Painting Table, Paint Simulator
- Defective Parts With (Dust, Dry Flow )
- Samples Of Different Type Of Points i.e. Synthetic, Nc Parts & Pu Base Points
- Process Flow Charts Showing Pre-treatment Details & Parameters, Process Flow Charts Showing Painting Process & Parameters
- Paint transfer pump, spray gun, hose for spray gun, pressure gauges, paints, primers & thinners, viscosity, testing meter, stop watch, stirrer, paint container, sand paper of different grades, masking tapes, tool kit, air blow gun, vacuum machine, infrared drier, paint gun cleaning system, paint gun stand, sealant gun, paint mixing scale, digital weighing machine, tag







rag, hangers for holding components, baking oven, paint thickness tester, pencil for scratch resistance test, adhesion tester with tape (cutter, knife), salt spray tester, lab equipment beakers/pipette, conductivity meter

- **lifting devices:** hoists, cranes, bins, part trolleys, pallet trucks
- Safety materials: Fire extinguisher, leather safety gloves, aprons, safety glasses, helmet, safety shoe, booth mask, nose mask, cap for head and first-aid kit
- Cleaning material: Tip cleaner, wire brush (M.S.), cleaning agents, cleaning cloth, waste container, dust pan and brush set, liquid soap, hand towel







#### Module 4: Perform sealing, painting and post-painting operations

#### Mapped to ASC/N3310, v2.0

#### **Terminal Outcomes:**

- Identify tools and equipment required for painting work.
- Perform the steps to carry out sealing and painting process.
- Perform the steps to carry out post-painting activities.

<b>Duration</b> : <50:00>	<b>Duration</b> : <100:00>
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul> <li>Describe painting standards and procedures followed in the company.</li> <li>List the sealing and painting tools, equipment, accessories and materials required during work.</li> <li>Describe the selection criteria of sealing and painting tools, equipment, accessories and materials required during work.</li> <li>Summarise the steps to be performed for checking the tools, equipment, accessories and materials before use.</li> <li>Discuss the information derived from the vehicle body drawing related to sealing and painting area including water leakage point.</li> <li>Discuss the necessary precautions to avoid any hazard and accident sealing and painting work.</li> <li>Discuss the importance of masking the vehicle parts.</li> <li>List the steps to be performed for applying under body sealer (PVC) on floor area and stone guard coating (SGC) on vehicle part.</li> <li>Describe wet film thickness (WFT) of under body sealing (PVC).</li> <li>Describe operation of paint booth in automatic and manual mode.</li> <li>Describe process flow of painting operations.</li> <li>Describe the selection criteria of base colour and appropriate colorants as per the work requirements/ instructions.</li> </ul>	<ul> <li>Demonstrate the standard operating procedure to use sealing and painting tools, equipment, accessories and materials required during painting work.</li> <li>Show how to select the required sealing and painting tools, equipment, accessories and materials.</li> <li>Apply appropriate ways to check the tools, equipment, accessories and materials before use.</li> <li>Apply appropriate ways to check that vehicle body or parts are clean and free from wanted material or dust.</li> <li>Show how to check the sealer gun pressure before starting sealing process.</li> <li>Show how to apply the masking tape on area where sealing and painting application is not required.</li> <li>Demonstrate organisational specified procedure of applying under body sealer (PVC) on floor area with drain caps as per SOP/work instruction.</li> <li>Demonstrate organisational specified procedure of applying stone guard coating (SGC) on vehicle part as per SOP/work instruction.</li> <li>Apply appropriate inspection methods for identifying the defects like sealer pin hole, sealer crack, no sealer, ED drop, dry film thickness of SGC etc. after sealing process.</li> <li>Show how to check and record wet film thickness (WFT) of under body sealing</li> </ul>
Discuss how to mix the correct amount of	(PVC).
paint material as per specified ratio.	Employ appropriate ways to repair the
Describe correct technique for efficient  use of correct point agriculture of the correct technique for efficient  use of correct point agriculture of the correct technique for efficient techni	defects like sealer pin hole, sealer crack,
<ul><li>use of spray paint equipment.</li><li>Discuss importance of time gap or drying</li></ul>	no sealer, ED drop, dry film thickness of SGC.

Demonstrate

organisational

procedure of mixing paint material with

specified

paints.

time between application of two coats of







- State the importance of maintaining booth parameters during the painting process.
- Discuss the tasks to be performed postpainting.
- Summarise the commonly occurring defects in the painted parts.
- Discuss the impact of defects on the quality of painted parts.
- Explain the inspection methods for identifying the defects and checking the quality of painted parts as per the control plan.
- Discuss the process of segregating, tagging and storing of damaged and ok workpieces and maintaining records of segregation as per organisational guidelines.
- List different methods for disposing off waste material and scrap.

- additives as per the specified ratio.
- Apply appropriate ways to check the paint viscosity.
- Show how to dd reducer/ thinner/ water to adjust viscosity of paint mix as per requirement.
- Perform steps to prepare painting tools and material for painting job.
- Show how to adjust air pressure and flow of paint gun as required for the job.
- Demonstrate organizational specified procedure of applying primer and appropriate coats of paint on vehicle body parts.
- Apply appropriate ways to check that paint coverage is uniform and there are no patches on the painted parts.
- Apply appropriate inspection methods for identifying the defects and checking the quality of painted parts after painting process.
- Prepare a sample inspection sheet and wite defects in it as per SOP.
- Employ appropriate ways to repair the defects on painted parts.
- Show how to do final inspection of painted parts and put the stamp for final confirmation.
- Show how to segregate, tag, store and record data of damaged and ok parts as per organisational guidelines.
- Show how to remove the masking tape and clean the work area after completion of work.
- Show how to dispose scrap or waste as per organisational guidelines.

#### **Classroom Aids:**

Whiteboard, marker pen, projector

#### **Tools, Equipment and Other Requirements**

- PPT's, teaching aids
- Pre-treatment line consisting of degreasing phosphating & passivation facility, all type of chemicals for pre-treatment
- R.O & D.M Water
- Painting booth (4'x6'x10') approx with water screen facility, Paint Mixing Room, Inspection Booth With Sufficient Light (700 Lux)
- Painting Table, Paint Simulator
- Defective Parts With (Dust, Dry Flow )
- Samples Of Different Type Of Points i.e. Synthetic, Nc Parts & Pu Base Points
- Process Flow Charts Showing Pre-treatment Details & Parameters, Process Flow Charts Showing Painting Process & Parameters
- Paint transfer pump, spray gun, hose for spray gun, pressure gauges, paints, primers & thinners, viscosity, testing meter, stop watch, stirrer, paint container, sand paper of different







grades, masking tapes, tool kit, air blow gun, vacuum machine, infrared drier, paint gun cleaning system, paint gun stand, sealant gun, paint mixing scale, digital weighing machine, tag rag, hangers for holding components, baking oven, paint thickness tester, pencil for scratch resistance test, adhesion tester with tape (cutter, knife), salt spray tester, lab equipment beakers/pipette, conductivity meter

- lifting devices: hoists, cranes, bins, part trolleys, pallet trucks
- **Safety materials**: Fire extinguisher, leather safety gloves, aprons, safety glasses, helmet, safety shoe, booth mask, nose mask, cap for head and first-aid kit
- Cleaning material: Tip cleaner, wire brush (M.S.), cleaning agents, cleaning cloth, waste container, dust pan and brush set, liquid soap, hand towel

## Module 5: Introduction to Employability Skills Mapped to DGT/VSQ/N0102

#### **Terminal Outcomes:**

• Discuss about Employability Skills in meeting the job requirements

<b>Duration</b> : <0.5:00>	<b>Duration</b> : <1:00>
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
Discuss the importance of Employability Skills in meeting the job requirements	<ul> <li>List different learning and employability related GOI and private portals and their usage</li> </ul>
Classroom Aids:	
Whiteboard, marker pen, projector	
Tools, Equipment and Other Requirements	

## Module 6: Constitutional values - Citizenship Mapped to DGT/VSQ/N0102

#### **Terminal Outcomes:**

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

<b>Duration</b> : <1:00>
Practical – Key Learning Outcomes
Show how to practice different environmentally sustainable practices
1







# Module 7: Becoming a Professional in the 21st Century Mapped to DGT/VSQ/N0102

#### **Terminal Outcomes:**

• Demonstrate professional skills required in 21st century

<b>Duration</b> : <1:00>	<b>Duration</b> : <1.5:00>	
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes	
<ul> <li>Discuss 21st century skills.</li> <li>Describe the benefits of continuous learning</li> </ul>	<ul> <li>Exhibit 21st century skills like Self-Awareness, Behavior Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn etc. in personal or professional life.</li> </ul>	
Classroom Aids:		
Whiteboard, marker pen, projector		
Tools, Equipment and Other Requirements		

## Module 8: Basic English Skills Mapped to DGT/VSQ/N0102

#### **Terminal Outcomes:**

• Practice basic English speaking.

uration: <6:00>
ractical – Key Learning Outcomes
Show how to use basic English sentences for everyday conversation in different contexts, in person and over the telephone Read and interpret text written in basic English Write a short note/paragraph / letter/e - mail using basic English







Whiteboard, marker pen, projector	
Tools, Equipment and Other Requirements	

# Module 9: Career Development & Goal Setting Mapped to DGT/VSQ/N0102

#### **Terminal Outcomes:**

• Demonstrate Career Development & Goal Setting skills.

<b>Duration</b> : <1:00>	<b>Duration</b> : <1:00>		
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes		
Discuss need of career development plan	<ul> <li>Demonstrate how to communicate in a well-mannered way with others.</li> <li>Create a career development plan with well-defined short- and long-term goals</li> </ul>		
Classroom Aids:			
Whiteboard, marker pen, projector			
Tools, Equipment and Other Requirements			

## Module 10: Communication Skills Mapped to DGT/VSQ/N0102

#### **Terminal Outcomes:**

• Practice basic communication skills.

<b>Duration</b> : <2:00>	<b>Duration</b> : <3:00>			
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes			
<ul> <li>Explain the importance of active listening for effective communication</li> <li>Discuss the significance of working collaboratively with others in a team</li> </ul>	Demonstrate how to communicate effectively using verbal and nonverbal communication etiquette			
Classroom Aids:				
Whiteboard, marker pen, projector				
Tools, Equipment and Other Requirements				







## Module 11: Diversity & Inclusion Mapped to DGT/VSQ/N0102

#### **Terminal Outcomes:**

• Describe PwD and gender sensitisation.

<b>Duration</b> : <1:00>	<b>Duration</b> : <1.5:00>			
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes			
Discuss the significance of reporting sexual harassment issues in time	<ul> <li>Demonstrate how to behave, communicate, and conduct oneself appropriately with all genders and PwD</li> </ul>			
Classroom Aids:				
Whiteboard, marker pen, projector				
Tools, Equipment and Other Requirements				

# Module 12: Financial and Legal Literacy Mapped to DGT/VSQ/N0102

#### **Terminal Outcomes:**

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

<b>Duration</b> : <2:00>	<b>Duration</b> : <3:00>			
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes			
<ul> <li>List the common components of salary and compute income, expenditure, taxes, investments etc.</li> <li>Discuss the legal rights, laws, and aids</li> </ul>	<ul> <li>Outline the importance of selecting the right financial institution, product, and service</li> <li>Demonstrate how to carry out offline and online financial transactions, safely and securely</li> </ul>			
Classroom Aids:				
Whiteboard, marker pen, projector				
Tools, Equipment and Other Requirements				







# Module 13: Essential Digital Skills Mapped to DGT/VSQ/N0102

#### **Terminal Outcomes:**

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

<b>Duration</b> : <6:00>				
Practical – Key Learning Outcomes				
<ul> <li>Show how to operate digital devices and use the associated applications and features, safely and securely</li> <li>Create sample word documents, excel sheets and presentations using basic features</li> <li>Utilize virtual collaboration tools to work effectively</li> </ul>				
Classroom Aids:				
Whiteboard, marker pen, projector				
Tools, Equipment and Other Requirements				

# Module 14: Entrepreneurship Mapped to DGT/VSQ/N0102

#### **Terminal Outcomes:**

• Describe opportunities as an entrepreneur.

<b>Duration</b> : <3:00>	Duration: <4:00> Practical – Key Learning Outcomes		
Theory – Key Learning Outcomes			
<ul> <li>Explain the types of entrepreneurship and enterprises</li> <li>Discuss how to identify opportunities for potential business, sources of funding and associated financial and legal risks with its mitigation plan</li> <li>Describe the 4Ps of Marketing-Product, Price, Place and Promotion and apply them as per requirement</li> </ul>	Create a sample business plan, for the selected business opportunity		







Classroom Aids:		
Whiteboard, marker pen, projector		
Tools, Equipment and Other Requirements		

# Module 15: Customer Service Mapped to DGT/VSQ/N0102

#### **Terminal Outcomes:**

• Describe ways of maintaining customer.

<b>Duration</b> : <2:00>	Duration: <3:00> Practical – Key Learning Outcomes			
Theory – Key Learning Outcomes				
<ul> <li>Explain the significance of identifying customer needs and addressing them.</li> <li>Explain the significance of identifying customer needs and responding to them in a professional manner.</li> <li>Discuss the significance of maintaining hygiene and dressing appropriately.</li> </ul>	Demonstrate how to maintain hygiene and dressing appropriately.			
Classroom Aids:				
Whiteboard, marker pen, projector				
Tools, Equipment and Other Requirements				

# Module 16: Getting ready for apprenticeship & Jobs *Mapped to DGT/VSQ/N0102*

#### **Terminal Outcomes:**

• Describe ways of preparing for apprenticeship & Jobs appropriately.

<b>Duration</b> : <3:00>	<b>Duration</b> : <i>&lt;5:00&gt;</i>			
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes			
<ul> <li>Discuss the significance of maintaining hygiene and confidence during an interview</li> <li>List the steps for searching and registering for apprenticeship opportunities</li> </ul>	<ul> <li>Create a professional Curriculum Vitae (CV)</li> <li>Use various offline and online job search sources such as employment exchanges, recruitment agencies, and job portals respectively</li> <li>Perform a mock interview</li> </ul>			
Classroom Aids:				
Whiteboard, marker pen, projector				
Tools, Equipment and Other Requirements				







### **Annexure**

### **Trainer Requirements**

Trainer Prerequisites						
Minimum Educational	Specialization	Relevant Industry Experience		Training Experience		Remarks
Qualification		Years	Specialization	Years	Specialization	
ITI	Mechanics/Fitter	5	Turner/ Fitter/Electrician	1	Turner/ Fitter/Electrician	NA
ITI	Mechanics/Fitter	6	Turner/Fitter/ Electrician	0	Turner/Fitter/ Electrician	NA
Diploma	Mechanical/ Automobile	3	Mechanical/ Automobile	1	Mechanical/ Automobile	NA
Diploma	Mechanical/ Automobile	4	Mechanical/ Automobile	0	Mechanical/ Automobile	NA

Trainer Certification			
Domain Certification Platform Certification			
"Automotive Painting Technician, ASC/Q3304, version 2.0". Minimum accepted score is 80%.	Recommended that the trainer is certified for the job role "Trainer (VET and Skills)", Mapped to Qualification Pack: MEP/Q2601, V2.0" Minimum accepted score is 80%		







#### **Assessor Requirements**

Assessor Prerequisites								
Minimum Educational Qualification	Specialization	Relevant Industry Experience		Training/Assessment Experience		Remarks		
		Years	Specialization	Years	Specialization			
ITI	Turner/ Fitter/Electrician	6	Turner/ Fitter/Electrician	1	Turner/ Fitter/Electrician	NA		
ITI	Turner/Fitter/ Electrician	7	Turner/Fitter/ Electrician	0	Turner/Fitter/ Electrician	NA		
Diploma	Mechanical/Electrical/ Automobile	4	Mechanical/Electrical/ Automobile	1	Mechanical/Electrical/ Automobile	NA		
Diploma	Mechanical/Electrical/ Automobile	5	Mechanical/Electrical/ Automobile	0	Mechanical/Electrical/ Automobile	NA		

Assessor Certification				
Domain Certification	Platform Certification			
"Automotive Painting Technician, ASC/Q3304, version 2.0". Minimum accepted score is 80%.	Recommended that the Accessor is certified for the job role "Assessor (VET and Skills)", Mapped to Qualification Pack: MEP/Q2701, V2.0" Minimum accepted score is 80%.			







#### **Assessment Strategy**

#### 1. Assessment System Overview:

- Batches assigned to the assessment agencies for conducting the assessment on SDMS/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:

- 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 created by the Subject Matter Experts (SME)
- Question papers created by the SME 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	
SOP	Standard Operating Procedure	
WI	Work Instructions	
PPE	Personal Protective equipment	