



# Model Curriculum

**QP Name: Warehouse Associate (Electives –Automated Warehouse/ Cold Chain Warehouse/ Dry Bulk Warehouse/ Bonded Warehouse)**

**QP Code: LSC/Q0101**

**QP Version: 2.0**

**NSQF Level: 3**

**Model Curriculum Version: 2.0**

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## Training Parameters

<b>Sector</b>	Logistics
<b>Sub-Sector</b>	Warehousing (Storage and Packaging)
<b>Occupation</b>	Warehousing operations, packaging, documentation and reporting, engineering/maintenance)
<b>Country</b>	India
<b>NSQF Level</b>	3
<b>Aligned to NCO/ISCO/ISIC Code</b>	NCO-2015/ 4321.0601 to 0604 and ISCO -08/4321, 4322, 8344
<b>Minimum Educational Qualification and Experience</b>	Grade 10 Pass Or Grade 8 pass and pursuing continuous schooling in regular school with vocational subject. Or 8th grade pass + 2-year relevant experience Or Previous relevant Qualification of NSQF Level 2 (Loader/ Unloader) + 1-year relevant experience
<b>Pre-Requisite License or Training</b>	NA
<b>Minimum Job Entry Age</b>	18
<b>Last Reviewed On</b>	28/02/2023
<b>Next Review Date</b>	28/02/2026
<b>NSQC Approval Date</b>	28/02/2023
<b>QP Version</b>	2.0
<b>Model Curriculum Creation Date</b>	07/10/2022
<b>Model Curriculum Valid Up to Date</b>	28/02/2026
<b>Model Curriculum Version</b>	2.0
<b>Minimum Duration of the Course</b>	480
<b>Maximum Duration of the Course</b>	780

## 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 will be able to:

- Analyse activities scheduled and corresponding resources allocated
- Perform picking, packaging, labelling, kitting and binning activities at the warehouse
- Execute safe loading and unloading of goods at the warehouse
- Comply to workplace integrity, ethical and regulatory practices
- Manage workplace for safe and healthy work environment by following and ensuring compliance to regulatory and safety norms
- Demonstrate safe segregation, grading, storage, temperature control, and movement of goods in a cold storage warehouse for perishable goods
- Execute goods sorting, storage, picking, inventory counting and movement of goods in a FMCG warehouse
- Perform safe storage, packaging, palletisation and process improvement activities in an automotive warehouse
- Perform cargo handling, volume/weight measurement, pest control, spillage control and equipment operations in a dry bulk warehouse
- Inspect invoices for correct application of GST.

### Compulsory Modules

The table lists the modules, their duration and mode of delivery.

NOS and Module Details	Theory Duration	Practical Duration	On-the-Job Training Duration (Mandatory)	On-the-Job Training Duration (Recommended)	Total Duration
<b>Bridge Module</b>	<b>20</b>	<b>10</b>			<b>30</b>
Module 1: Introduction to Warehouse Associate	20	10			30
<b>LSC/N0133 – Unloading and QC V2.0</b> <b>3</b>	<b>20</b>	<b>35</b>	<b>5</b>		<b>60</b>
Module 2: Receiving	20	35	5		60
<b>LSC/N0134– Traditional/Manual Put-away &amp; Picking V2.0</b> <b>3</b>	<b>20</b>	<b>35</b>	<b>5</b>		<b>60</b>
Module 3: Put-away & Picking	20	35	5		60
<b>LSC/N0135-GTP/AGV/Light/Voice assisted Put-away &amp; Picking V2.0</b> <b>3</b>	<b>20</b>	<b>35</b>	<b>5</b>		<b>60</b>
Module 4: Technology assisted put-away & Picking	20	35	5		60

<b>LSC/N0136 – Order verification and Loading V2.0 3</b>	<b>20</b>	<b>35</b>	<b>5</b>		<b>60</b>
Module 5: Dispatch	20	35	5		60
<b>LSC/N0137 – VAS (Labelling/Kitting/Packaging/Binning) V2.0 3</b>	<b>20</b>	<b>35</b>	<b>5</b>		<b>60</b>
Module 6: VAS	20	35	5		60
<b>LSC/N9904 - Maintain integrity and ethics in operations V1.0 6</b>	<b>10</b>	<b>20</b>			<b>30</b>
Module 7: Guidelines on integrity and ethics	10	20			30
<b>LSC/N9905 - Follow and health, safety and security procedures V1.0 6</b>	<b>10</b>	<b>15</b>	<b>5</b>		<b>30</b>
Module 8: Compliance to health, safety and security norms	10	15	5		30
<b>DGT/VSQ/N0101 Employability</b>	<b>15</b>	<b>15</b>			<b>30</b>
<b>Total Duration</b>	<b>155</b>	<b>235</b>	<b>30</b>		<b>420</b>

## Elective Modules

The table lists the elective modules, their duration and mode of delivery.

### Elective 1: Perishable Goods

NOS and Module Details	Theory Duration	Practical Duration	On-the-Job Training Duration (Mandatory)	On-the-Job Training Duration (Recommended)	Total Duration
<b>LSC/N0103 - Handle perishable goods in warehouse</b>  <b>V1.0</b> <b>3</b>	<b>30</b>	<b>30</b>			<b>60</b>
Module 9: Perishable goods handling	30	30			60
<b>Total Duration</b>	<b>30</b>	<b>30</b>			<b>60</b>

### Elective 2: Fast Moving Consumer Goods

NOS and Module Details	Theory Duration	Practical Duration	On-the-Job Training Duration (Mandatory)	On-the-Job Training Duration (Recommended)	Total Duration
<b>LSC/N0104 – Handle FMCG goods in warehouse</b>  <b>V1.0</b> <b>3</b>	<b>30</b>	<b>30</b>			<b>60</b>
Module 10: FMCG handling	30	30			60
<b>Total Duration</b>	<b>30</b>	<b>30</b>			<b>60</b>

### Elective 3: Automotive Goods

NOS and Module Details	Theory Duration	Practical Duration	On-the-Job Training Duration (Mandatory)	On-the-Job Training Duration (Recommended)	Total Duration
<b>LSC/N0105 – Handle automotive goods in warehouse V1.0 3</b>	<b>30</b>	<b>30</b>			<b>60</b>
Module 11: Automotive goods handling	30	30			60
<b>Total Duration</b>	<b>30</b>	<b>30</b>			<b>60</b>

### Elective 4: Dry Bulk Cargo

NOS and Module Details	Theory Duration	Practical Duration	On-the-Job Training Duration (Mandatory)	On-the-Job Training Duration (Recommended)	Total Duration
<b>LSC/N0106 – Handle dry bulk cargo in warehouse V1.0 3</b>	<b>30</b>	<b>30</b>			<b>60</b>
Module 12: Dry bulk cargo handling	30	30			60
<b>Total Duration</b>	<b>30</b>	<b>30</b>			<b>60</b>

## Elective 5: Ecommerce

NOS and Module Details	Theory Duration	Practical Duration	On-the-Job Training Duration (Mandatory)	On-the-Job Training Duration (Recommended)	Total Duration
<b>LSC/N0138 – Handle E-com operations in warehouse V2.0 3</b>	<b>30</b>	<b>30</b>			<b>60</b>
Module 13: Ecommerce operations handling	30	30			60
<b>Total Duration</b>	<b>30</b>	<b>30</b>			<b>60</b>



## Option Modules

The table lists the option modules, their duration and mode of delivery.

### Option 1: GST Application

NOS and Module Details	Theory Duration	Practical Duration	On-the-Job Training Duration (Mandatory)	On-the-Job Training Duration (Recommended)	Total Duration
<b>LSC/N9906 – Verify GST invoices V1.0 3</b>	<b>30</b>	<b>30</b>			<b>60</b>
Module 14: Verify GST invoices	30	30			60
<b>Total Duration</b>	<b>30</b>	<b>30</b>			<b>60</b>

# Module Details

## Module 1: Introduction to Warehouse Associate

### Mapped to Bridge Module

#### Terminal Outcomes:

- Describe the basic structure and function of supply chain
- Detail the various functions of a warehouse associate

<b>Duration:</b> 20:00	<b>Duration:</b> 10:00
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul style="list-style-type: none"> <li>• Classify the components of supply chain and logistics sector</li> <li>• Detail the various sub-sectors and the opportunities in them</li> <li>• Illustrate the job role of warehouse associate – and its connection with various other job roles</li> <li>• Describe the various activities in a warehouse</li> </ul>	<ul style="list-style-type: none"> <li>• Identify the various MHEs used in warehouse</li> <li>• Perform various operations functions of a warehouse manager</li> </ul>
<b>Classroom Aids</b>	
Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Board eraser	
<b>Tools, Equipment and Other Requirements</b>	

## Module 2: Receiving operations

Mapped to LSC/N0133, v1.0

### Terminal Outcomes:

- Detail the steps to be performed in receiving operations as per SOP

<b>Duration: 20:00</b>	<b>Duration: 35:00</b>
<p><b>Theory – Key Learning Outcomes</b></p> <ul style="list-style-type: none"> <li>• Detail the list of steps to be performed during inspection of vehicle</li> <li>• List the steps to be performed for unloading of goods</li> <li>• Describe the MHE equipment used for unloading</li> <li>• Detail the PPE to be used for unloading of various types of goods</li> <li>• Detail the usage of tools, ropes/chains to secure product/crate</li> <li>• Discuss handling procedure for breakage/ spillage of package/ consignment</li> <li>• Explain the procedure for parking MHE equipment correctly</li> <li>• Discuss the steps to be performed during quality check of goods as per SOP</li> <li>• Detail the steps to be performed for during put away of goods</li> </ul>	<p><b>Practical – Key Learning Outcomes</b></p> <ul style="list-style-type: none"> <li>• Demonstrate the various steps to be performed during inspection of vehicle</li> <li>• Perform the steps for unloading of goods as per SOP</li> <li>• Identify the MHE equipment used for unloading</li> <li>• Identify the PPE to be used for unloading of various types of goods</li> <li>• Demonstrate usage of tools, ropes/chains to secure product/crate</li> <li>• Perform handling of breakage/ spillage of package/ consignment as per SOP</li> <li>• Demonstrate the procedure of parking MHE equipment correctly</li> <li>• Demonstrate the steps to be performed during quality check of goods as per SOP</li> <li>• Perform the steps to be performed during put away of goods</li> </ul>
<p><b>Classroom Aids</b></p> <p>Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Board eraser</p>	
<p><b>Tools, Equipment and Other Requirements</b></p> <p>Personal Protective Equipment (PPEs), Material Handling Equipment (MHEs) like Forklift, Reach stacker, pallet truck, etc., barcode scanner, LLMS &amp; WMS (learning version), packing devices, packing material, markers and stationery, etc..</p>	

## Module 3: Put-away and Picking

Mapped to LSC/N0134, V1.0

### Terminal Outcomes:

- Detail the steps to be followed for put away and picking as per SOP

<b>Duration: 20:00</b>	<b>Duration: 35:00</b>
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul style="list-style-type: none"> <li>• Detail the steps to be performed for put away activities</li> <li>• Discuss the steps to be performed for picking activities as per SOP</li> <li>• List the different components of a picklist</li> <li>• Discuss the different types of MHE's</li> <li>• Describe picking process</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate the steps to be performed for put away activities</li> <li>• Perform picking as per SOP</li> <li>• Identify the different component of a picklist</li> <li>• Identify the type of MHE to be used for different types of goods</li> </ul>
<b>Classroom Aids</b>	
Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Board eraser	
<b>Tools, Equipment and Other Requirements</b>	
Personal Protective Equipment (PPEs), Material Handling Equipment (MHEs) like Forklift, Reach stacker, pallet truck, etc., barcode scanner, LLMS & WMS (learning version), packing devices, packing material, markers and stationery, etc..	

## Module 4: GTP/AGV/Light/Voice assisted put-away & picking

*Mapped to LSC/N0135, v1.0*

### Terminal Outcomes:

- Detail the appropriate steps GTP/ AGV/ Light/Voice assisted put away activities as per SOP
- Demonstrate the appropriate steps for GTP/ AGV/ Light/ Voice assisted picking activities as per SOP

<b>Duration: 20:00</b>	<b>Duration: 35:00</b>
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul style="list-style-type: none"> <li>• List the steps to be performed for technology assisted put away activities</li> <li>• Discuss the steps to be performed for picking process</li> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate the steps to be performed for technology assisted put away activities</li> <li>• Perform picking as per SOP</li> <li>•</li> </ul>
<b>Classroom Aids</b>	
Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Board eraser	
<b>Tools, Equipment and Other Requirements</b>	
MS Office compressor, condenser, evaporator, temperature and humidity sensor, simulator, tools and tackles, consumables, cold storage equipment, gas leak detectors, LLMS & WMS (learning version), electrical systems, start relays and defrost timers, pressure pumps, etc.	

## Module 5: Dispatch activities

Mapped to LSC/N0136, v1.0

### Terminal Outcomes:

- Detail the steps to be performed during dispatch activities of goods at a warehouse

<b>Duration: 20:00</b>	<b>Duration: 35:00</b>
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul style="list-style-type: none"> <li>Detail the steps to be performed during order verification</li> <li>Discuss the steps to be performed during loading activities as per SOP</li> <li>List the steps to be performed for loading of goods</li> <li>Describe the MHE equipment used for loading</li> <li>Detail the PPE to be used for loading of various types of goods</li> <li>Detail the usage of tools, ropes/chains to secure product/crate</li> <li>Discuss handling procedure for breakage/ spillage of package/ consignment</li> <li>Explain the procedure for parking MHE equipment correctly</li> <li></li> </ul>	<ul style="list-style-type: none"> <li>Demonstrate the steps to be performed during order verification process</li> <li>Performing loading as per SOP</li> <li>Perform the steps for unloading of goods as per SOP</li> <li>Identify the MHE equipment used for unloading</li> <li>Identify the PPE to be used for unloading of various types of goods</li> <li>Demonstrate usage of tools, ropes/chains to secure product/crate</li> <li>Perform handling of breakage/ spillage of package/ consignment as per SOP</li> <li>Demonstrate the procedure of parking MHE equipment correctly</li> </ul>
<b>Classroom Aids</b>	
Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Board eraser	
<b>Tools, Equipment and Other Requirements</b>	
MS Office compressor, condenser, evaporator, temperature and humidity sensor, simulator, tools and tackles, consumables, cold storage equipment, LLMS & WMS (learning version), gas leak detectors, electrical systems, start relays and defrost timers, pressure pumps, etc.	

## Module 6: VAS operations

Mapped to LSC/N0147, v1.0

### Terminal Outcomes:

- Detail the steps to be performed for VAS operations as per SOP

<b>Duration: 20:00</b>	<b>Duration: 35:00</b>
<p><b>Theory – Key Learning Outcomes</b></p> <ul style="list-style-type: none"> <li>Detail the steps to be performed for packing as per SOP</li> <li>Detail the steps to be performed for labelling as per SOP</li> <li>Detail the steps to be performed for kitting as per SOP</li> <li>Detail the steps to be performed for binning as per SOP</li> <li>Describe the items used for packing and labelling</li> <li>Discuss the different types of packing and labelling process</li> <li>Describe the PPE and equipment used for kitting</li> <li>Discuss the inspection procedure for kitting</li> <li>Explain kitting process</li> <li>List the equipment and stationery used for binning</li> <li>Explain binning process for various types of goods</li> <li></li> </ul>	<p><b>Practical – Key Learning Outcomes</b></p> <ul style="list-style-type: none"> <li>Demonstrate the packing process as per SOP</li> <li>Exhibit the labelling process as per SOP</li> <li>Perform the kitting process as per SOP</li> <li>Demonstrate the binning process as per SOP</li> <li>Perform packing using the appropriate items for packaging and labelling</li> <li>Demonstrate different types of packing and labelling process</li> <li>Use the appropriate PPE and equipment for kitting</li> <li>Inspect kitting items for damages and errors</li> <li>Demonstrate kitting process</li> <li>Use the appropriate equipment and stationery for binning</li> <li>Demonstrate binning for various types of goods</li> </ul>
<p><b>Classroom Aids</b></p> <p>Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Board eraser</p>	
<p><b>Tools, Equipment and Other Requirements</b></p> <p>Computer, Enterprise Resource Planning (ERP), LLMS &amp; WMS (learning version), warehouse design software, inventory models, stationery, SOP etc..</p>	

## Module 7: Guidelines on integrity and ethics

Mapped to LSC/N9904, v1.0

### Terminal Outcomes:

- Explain the concepts of integrity, ethics
- Detail the various regulatory requirements related to logistics industry

<b>Duration: 10:00</b>	<b>Duration: 20:00</b>
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul style="list-style-type: none"> <li>• Describe the concepts of integrity, ethics</li> <li>• Detail the various regulatory requirements related to logistics industry</li> <li>• Explain data and information security practices</li> <li>• Discuss corrupt practices</li> <li>• Discuss regulatory requirements, code of conduct and etiquettes</li> <li>• Detail the procedure for documenting all integrity and ethics violations Explain escalation matrix for reporting deviation</li> </ul>	<ul style="list-style-type: none"> <li>• Practice the principles of integrity and ethics</li> <li>• Follow the various regulatory requirements related to logistics industry</li> <li>• Perform data and information security practices</li> <li>• Identify corrupt practices</li> <li>• Comply to regulatory requirements</li> <li>• Practice code of conduct and etiquettes</li> <li>• Document all integrity and ethics violations</li> <li>• Report deviation as per the escalation matrix</li> </ul>
<b>Classroom Aids</b>	
Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Board eraser	
<b>Tools, Equipment and Other Requirements</b>	
MS Project, MS Office, Computer, Projector, TV, Stationery, Worksheets, Statistical Tools compressor, condenser, evaporator, temperature and humidity sensor, LLMS & WMS (learning version), simulator, tools and tackles, consumables	



## Module 8: Compliance to health and safety standards

Mapped to LSC/N9905, v1.0

### Terminal Outcomes:

- Describe health, safety, and security procedures in warehouse
- Demonstrate the inspection procedure to ensure appropriate and safe conditions of activity area and equipment
- Illustrate the standard protocol to be followed during emergency situations, accidents and breach of safety

<b>Duration: 10:00</b>	<b>Duration: 15:00</b>
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul style="list-style-type: none"> <li>• Detail health, safety and security procedures in cold storage plants</li> <li>• Detail the safety precautionary method</li> <li>• Explain the inspection procedure to ensure appropriate and safe conditions of activity area and equipment</li> <li>• Detail hygiene and sanitation standards as per regulatory bodies such as FSSAI, APEDA</li> <li>• Detail the pest control methods to ensure no pest</li> <li>• Discuss unsafe working conditions</li> <li>• Describe the inspection procedure to check safe handling of hazardous goods</li> <li>• Discuss the standard protocol to be followed during emergency situations, accidents and breach of safety</li> </ul>	<ul style="list-style-type: none"> <li>• Communicate effectively with seniors to understand targets, performance indicators</li> <li>• Practice responsible, disciplined and respectful behavior in the workplace</li> <li>• Resolve conflicts amongst colleagues</li> <li>• Practice cooperation, coordination, etiquette and collaboration with colleagues and clients</li> <li>• Provide expert inputs and guide colleagues</li> <li>• Communicate effectively with clients to understand work requirements</li> <li>• Solve client escalations effectively</li> <li>• Establish and maintain good client relationships</li> </ul>
<b>Classroom Aids</b>	
Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Board eraser	
<b>Tools, Equipment and Other Requirements</b>	
MS Project, MS Office, Computer, Projector, TV, Stationery, Worksheets, Statistical Tools compressor, condenser, evaporator, temperature and humidity sensor, LLMS & WMS (learning version), simulator, tools and tackles, consumables	

## Module 9: Handle perishable goods in warehouse

Mapped to LSC/N0103, v1.0

### Terminal Outcomes:

- Demonstrate the steps to be followed for handling of perishable goods in a warehouse

<b>Duration: 30:00</b>	<b>Duration: 30:00</b>
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul style="list-style-type: none"> <li>• Describe the coding requirement for various types of products</li> <li>• Discuss cold chain warehouse temperature management requirements for different types of products</li> <li>• Demonstrate segregation, sorting, and grading operations in a cold chain warehouse</li> <li>• List the equipment used while handling goods in cold chain warehouse</li> <li>• Demonstrate MHE usage for loading, unloading and movement of goods</li> <li>• Explain quarantine procedure for contaminated goods</li> <li>• Detail the precautions to be followed to avoid contamination</li> <li>• Describe the cleaning process of cold chain warehouse and its equipment</li> </ul>	<ul style="list-style-type: none"> <li>• Identify the coding requirement for various types of products</li> <li>• Administer the cold chain warehouse temperature management requirements for different types of products</li> <li>• Perform segregation, sorting, and grading operations in a cold chain warehouse</li> <li>• Identify the equipment used while handling goods in cold chain warehouse</li> <li>• Demonstrate MHE usage for loading, unloading and movement of goods</li> <li>• Identify contaminated goods</li> <li>• Perform quarantine procedure for contaminated goods</li> <li>• Practice precautions while handling goods to avoid contamination</li> <li>• Perform cleaning of cold chain warehouse and equipment as per SOP</li> </ul>
<b>Classroom Aids</b>	
Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Board eraser	
<b>Tools, Equipment and Other Requirements</b>	
Personal Protective Equipment (PPEs), Material Handling Equipment (MHEs) like Forklift, Reach stacker, pallet truck, etc., barcode scanner, packing devices, LLMS & WMS (learning version), packing material, markers and stationery, etc	

## Module 10: Handle FMCG goods in warehouse

Mapped to LSC/N0104, v1.0

### Terminal Outcomes:

- Demonstrate the steps to be followed for effective handling of FMCG goods in a warehouse

<b>Duration: 30:00</b>	<b>Duration: 30:00</b>
<p><b>Theory – Key Learning Outcomes</b></p> <ul style="list-style-type: none"> <li>• List the various types of coding in a FMCG warehouse</li> <li>• Detail the components of documentation for FMCG warehouse goods movement process</li> <li>• Demonstrate the various types of order picking such as, single order picking, batch picking, zone picking, pick and pass, multi batch picking, order consolidation, wave picking etc.</li> <li>• Demonstrate sorting and placing of goods as per size, type, style, colour, or product code</li> <li>• Demonstrate the process of packaging and labelling</li> <li>• Explain FIFO, LIFO inventory management processes</li> <li>• Detail the steps in inventory counting process</li> <li>• Explain the procedure for cleaning aisles and product slots</li> <li>•</li> </ul>	<p><b>Practical – Key Learning Outcomes</b></p> <ul style="list-style-type: none"> <li>• Identify various types of coding in a FMCG warehouse</li> <li>• Identify goods and its storage location based on picklist</li> <li>• Perform various types of order picking such as, single order picking, batch picking, zone picking, pick and pass, multi batch picking, order consolidation, wave picking etc.</li> <li>• Perform sorting and placing of goods as per size, type, style, colour, or product code</li> <li>• Perform packaging and labelling</li> <li>• Perform FIFO, LIFO inventory management processes</li> <li>• Perform inventory counting process</li> <li>• Perform cleaning of aisles and product slots</li> <li>• Report defective or broken products</li> </ul>
<p><b>Classroom Aids</b></p> <p>Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Board eraser</p>	
<p><b>Tools, Equipment and Other Requirements</b></p> <p>Personal Protective Equipment (PPEs), Material Handling Equipment (MHEs) like Forklift, Reach stacker, pallet truck, etc., barcode scanner, LLMS &amp; WMS (learning version), packing devices, packing material, markers and stationery, etc.</p>	

## Module 11: Handle automotive goods in warehouse

Mapped to LSC/N0105, v1.0

### Terminal Outcomes:

- Demonstrate the steps to be followed for effective handling of automotive goods in warehouse

<b>Duration: 30:00</b>	<b>Duration: 30:00</b>
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul style="list-style-type: none"> <li>• Detail packing/ de-packing and labelling of automotive goods</li> <li>• Explain loading/ unloading of goods from fixtures/ crates/ pallets/ boxes</li> <li>• Discuss Kanban process of material storage and inventory management</li> <li>• Explain the MHE used for various types of automotive goods</li> <li>• Discuss the precautions to be taken while loading/ unloading, strapping and lashing of goods</li> <li>• Demonstrate loading/ unloading, strapping and lashing of goods</li> <li>• Demonstrate different types of packaging and palletisation</li> <li>• Detail the steps in inventory counting process</li> <li>• Discuss the process improvement tools such as 5S, JIT, FMEA, kaizen, poka-yoke etc.</li> <li>• Discuss the appropriate procedure for preparing daily reports</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate packing/ de-packing and labelling of automotive goods</li> <li>• Demonstrate loading/ unloading of goods from fixtures/ crates/ pallets/ boxes</li> <li>• Perform Kanban process of material storage and inventory management</li> <li>• Identify the MHE used for various types of automotive goods</li> <li>• Practice precautions while loading/ unloading, strapping and lashing of goods</li> <li>• Perform loading/ unloading, strapping and lashing of goods</li> <li>• Perform different types of packaging and palletisation</li> <li>• Report defective or broken products</li> <li>• Perform inventory counting process</li> <li>• Apply process improvement tools such as 5S, JIT, FMEA, kaizen, poka-yoke etc.</li> <li>• Prepare reports on daily activities</li> </ul>
<b>Classroom Aids</b>	
Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Board eraser	
<b>Tools, Equipment and Other Requirements</b>	
Personal Protective Equipment (PPEs), Material Handling Equipment's (MHEs) like forklift, reach stacker, pallet truck, etc., walkie stacker, barcode scanner, LLMS & WMS (learning version), packing devices, packing material, markers and stationery, etc.	

## Module 12: Handle bulk cargo in warehouse

Mapped to LSC/N0106, v1.0

### Terminal Outcomes:

- Demonstrate the steps to be followed for effective handling of dry bulk cargo in warehouse

<b>Duration: 30:00</b>	<b>Duration: 30:00</b>
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul style="list-style-type: none"> <li>• Discuss the space and volume computation methods for different types of goods in dry bulk warehouse</li> <li>• Detail the usage of various MHE and conveyors in dry bulk warehouse</li> <li>• Discuss the appropriate PPEs to be used while handling dry bulk cargo</li> <li>• Demonstrate usage of MHE for cargo movement</li> <li>• List the precautions to be taken while moving cargo</li> <li>• Explain weight and volume measurement methods to distribute storage in different locations</li> <li>• Detail pest control methods to be undertaken for different types of goods</li> <li>• Explain inventory measurement in dry bulk warehouse</li> </ul>	<ul style="list-style-type: none"> <li>• Check space and volume requirements for different types of goods in dry bulk warehouse</li> <li>• Identify the various MHE and conveyors in dry bulk warehouse</li> <li>• Use the appropriate PPEs while handling dry bulk cargo</li> <li>• Operate conveyor for cargo movement</li> <li>• Practice precautions while moving cargo</li> <li>• Check weight and volume metrics to distribute storage in different locations</li> <li>• Perform pest control methods to be undertaken for different types of goods</li> <li>• Measure stored inventory in dry bulk warehouse</li> </ul>
<b>Classroom Aids</b>	
Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Board eraser	
<b>Tools, Equipment and Other Requirements</b>	
Personal Protective Equipment (PPEs), Material Handling Equipment's (MHEs), conveyors, measuring devices, LLMS & WMS (learning version), markers and stationery, etc	

## Module 13: Handle e-com operations

Mapped to LSC/N0106, v1.0

### Terminal Outcomes:

- Demonstrate the steps to be followed for effective handling of e-com operations in a warehouse

<b>Duration: 30:00</b>	<b>Duration: 30:00</b>
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul style="list-style-type: none"> <li>• Discuss the various storage solutions, scanning devices, sorting mechanism etc</li> <li>• Detail the usage of various MHE and conveyors in a e-com warehouse</li> <li>• Discuss the appropriate PPEs to be used depending on the type of goods</li> <li>• Demonstrate usage of MHE for movement of high throughput cargo</li> <li>• List the precautions to be taken while moving cargo</li> <li>• Explain weight and volume measurement methods to distribute storage in different locations</li> <li>• Detail pest control methods to be undertaken for different types of goods</li> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate the various sorting mechanisms, packing process etc.</li> <li>• Identify the various MHE and conveyors in dry bulk warehouse</li> <li>• Use the appropriate PPEs depending on the type of good</li> <li>• Operate conveyor for movement of high throughput cargo</li> <li>• Practice precautions while moving cargo</li> <li>• Check weight and volume metrics of each parcel to ensure accuracy</li> <li>• Perform pest control methods to be undertaken for different types of goods</li> </ul>
<b>Classroom Aids</b>	
Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Board eraser	
<b>Tools, Equipment and Other Requirements</b>	
Personal Protective Equipment (PPEs), Material Handling Equipment's (MHEs), LLMS & WMS (learning version), conveyors, measuring devices, markers and stationery, etc	

## Module 14: Verify GST invoices

Mapped to LSC/N9906, v1.0

### Terminal Outcomes:

- Demonstrate the steps to be followed for effective bonded warehouse management

<b>Duration: 30:00</b>	<b>Duration: 30:00</b>
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul style="list-style-type: none"> <li>• Describe the GST application procedure in invoicing process</li> <li>• Detail the rules and regulation in applying and reversing GST</li> <li>• Inspect to identify faults in a document with GST computation</li> <li>• Describe GST documents approval process</li> <li>• Check for pending litigation from previous regime</li> <li>• Review monthly returns for compliance to regulations</li> <li>• Check correctness of tax payment records and acknowledgements received</li> </ul>	<ul style="list-style-type: none"> <li>• Prepare the GST application for invoicing process</li> <li>• Examine faults in a document with GST computation</li> <li>• Perform all activities for GST documents approval process</li> <li>• Examine for pending litigation from previous regime</li> <li>• Review monthly returns for compliance to regulations</li> <li>• Examine correctness of tax payment records and acknowledgements received</li> </ul>
<b>Classroom Aids</b>	
Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Board eraser	
<b>Tools, Equipment and Other Requirements</b>	
Laptop, MS office, ERP, stationery, worksheets, computer, LLMS & WMS (learning version), projector, GST guidelines etc.	

## Module 15: Employability Skills

Mapped to, DGT/VSQ/N0101, v1.0

### Terminal Outcomes:

- Appraise the significance of employability skills in meeting the job requirements
- Identify constitutional values, civic rights, duties, personal values and ethics and environmentally sustainable practices.
- Illustrate English and communication skills, customer service, entrepreneurship, and getting ready for jobs and apprenticeship.

<b>Duration: 15:00</b>	<b>Duration: 15:00</b>
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul style="list-style-type: none"> <li>• Detail the importance of Employability Skills in meeting the job requirements</li> <li>• Explain constitutional values, civic rights, duties, citizenship, responsibility towards society etc. that are required to be followed to become a responsible citizen.</li> <li>• Describe positive attitude, self - motivation, problem solving, time management skills and continuous learning mindset in different situations.</li> <li>• Discuss the significance of reporting sexual harassment issues in time</li> <li>• Appraise the significance of using financial products and services safely and securely.</li> <li>• Explain the importance of managing expenses, income, and savings.</li> <li>• Detail the significance of approaching the concerned authorities in time for any exploitation as per legal rights and laws</li> <li>• Discuss the significance of using internet for browsing, accessing social media platforms, safely and securely</li> <li>• Categorize the need for identifying opportunities for potential business, sources for arranging money and potential legal and financial challenges</li> <li>• Discuss the significance of maintaining hygiene and dressing appropriately</li> <li>• Discuss how to search and register for apprenticeship opportunities</li> </ul>	<ul style="list-style-type: none"> <li>• Analyze 21st century skills.</li> <li>• Practice appropriate basic English sentences/phrases while speaking</li> <li>• Demonstrate how to communicate in a well -mannered way with others.</li> <li>• Illustrate working with others in a team</li> <li>• Demonstrate how to conduct oneself appropriately with all genders and PwD</li> <li>• Operate digital devices and use the associated applications and features, safely and securely</li> <li>• Differentiate between types of customers</li> <li>• Create a biodata</li> <li>• Experiment with various sources to search and apply for jobs</li> <li>• Identify customer needs and address them</li> <li>• Compose the significance of dressing up neatly and maintaining hygiene for an interview</li> </ul>
<b>Classroom Aids</b>	
Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Board eraser, UPS, LCD Projector, Computer Tables & chairs	



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

Computer (PC) with latest configurations – and Internet connection with standard operating system and standard word processor and worksheet software (Licensed) (all software should either be latest version or one/two version below), Scanner cum Printer LLMS & WMS (learning version).

# Annexure

## Trainer Requirements

Trainer Prerequisites						
Minimum Educational Qualification	Specialization	Relevant Industry Experience		Training Experience		Remarks
		Years	Specialization	Years	Specialization	
12 <sup>th</sup> Pass	Warehousing	2	Warehousing	1	Warehousing	

Trainer Certification	
Domain Certification	Platform Certification
Certified for Job Role: “Warehouse Associate” mapped to QP: “LSC/Q0101, v2.0”. Minimum accepted score is 80%	Recommended that the Trainer is certified for the Job Role: “Trainer (VET and Skills)”, mapped to the Qualification Pack: “MEP/Q2601, V2.0” with minimum score of 80%

## Assessor Requirements

Assessor Prerequisites						
Minimum Educational Qualification	Specialization	Relevant Industry Experience		Training/Assessment Experience		Remarks
		Years	Specialization	Years	Specialization	
12 <sup>th</sup> Pass	NA	1	Warehousing	1	warehousing	

Assessor Certification	
Domain Certification	Platform Certification
Certified for Job Role: “Warehouse Associate” mapped to QP: “LSC/Q0101, v2.0”. Minimum accepted score is 80%	Recommended that the Assessor is certified for the Job Role: “Assessor (VET and Skills)”, mapped to the Qualification Pack: “MEP/Q2701, V2.0” with minimum score of 80%

## Assessment Strategy

The emphasis is on 'learning-by-doing' and practical demonstration of skills and knowledge based on the performance criteria. Accordingly, assessment criteria for each job role is set and made available in qualification pack.

The assessment papers for both theory and practical would be developed by Subject Matter Experts (SME) hired by Logistics Sector Skill Council or with the LSC accredited Assessment Agency as per the assessment criteria mentioned in the Qualification Pack. The assessments papers would also be checked for the various outcome-based parameters such as quality, time taken, precision, tools & equipment requirement etc.

Each NOS in the Qualification Pack (QP) is assigned a relative weightage for assessment based on the criticality of the NOS. Therein each Element/Performance Criteria in the NOS is assigned marks on relative importance, criticality of function and training infrastructure.

The following tools would be used for final assessment:

**1. Practical Assessment:** This comprises of a creation of mock environment in the skill lab which is equipped with all equipment required for the qualification pack.

Candidate's soft skills, communication, aptitude, safety consciousness, quality consciousness etc. is ascertained by observation and marked in observation checklist. The outcome is measured against the specified dimensions and standards to gauge the level of their skill achievements.

**2. Viva/Structured Interview:** This tool is used to assess the conceptual understanding and the behavioral aspects with regard to the job role and the specific task at hand. It also includes questions on safety, quality, environment, and equipment etc.

**3. On-Job Training:** OJT would be evaluated based on standard log book capturing departments worked on, key observations of learner, feedback and remarks of supervisor or mentor.

**4. Written Test:** Question paper consisting of 100 MCQs (Hard:40, Medium:30 and Easy: 30) with questions from each element of each NOS. The written assessment paper is comprised of following types of questions:

- i. True / False Statements
- ii. Multiple Choice Questions
- iii. Matching Type Questions
- iv. Fill in the blanks
- v. Scenario based Questions
- vi. Identification Questions

### QA Regarding Assessors:

Assessors are selected as per the “eligibility criteria” laid down by LSC for assessing each job role. The assessors selected by Assessment Agencies are scrutinized and made to undergo training and introduction to LSC Assessment Framework, competency based assessments, assessors guide etc. LSC conducts “Training of Assessors” program from time to time for each job role and sensitize assessors regarding assessment process and strategy which is outlined on following mandatory parameters:

- 1) Guidance regarding NSQF
- 2) Qualification Pack Structure
- 3) Guidance for the assessor to conduct theory, practical and viva assessments
- 4) Guidance for trainees to be given by assessor before the start of the assessments.
- 5) Guidance on assessments process, practical brief with steps of operations  
practical observation checklist and mark sheet
- 6) Viva guidance for uniformity and consistency across the batch.
- 7) Mock assessments
- 8) Sample question paper and practical demonstration

## References

## Glossary

Term	Description
<b>Key Learning Outcome</b>	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).
<b>OJT (M)</b>	On-the-job training (Mandatory); trainees are mandated to complete specified hours of training on site
<b>OJT (R)</b>	On-the-job training (Recommended); trainees are recommended the specified hours of training on site
<b>Training Outcome</b>	Training outcome is a statement of what a learner will know, understand and be able to do upon the completion of the training.
<b>Terminal Outcome</b>	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

<b>Term</b>	<b>Description</b>
<b>QP</b>	Qualification Pack
<b>NSQF</b>	National Skills Qualification Framework
<b>NSQC</b>	National Skills Qualification Committee
<b>NOS</b>	National Occupational Standards