Model Curriculum

QP Name: Junior Cargo Operator – Port Terminals/CFS/ICD

(Options – Signalman Activities/ Customs Clearance)

QP Code: LSC/Q3515

QP Version: 1.0

NSQF Level: 3

Model Curriculum Version: 1.0

Table of Contents

Training Parameters

Sector	Logistics
Sub-Sector	Port Terminals, ICD and CFS
Occupation	Port Operations Coordination
Country	India
NSQF Level	3
Aligned to NCO/ISCO/ISIC Code	NCO-2015/9333
Minimum Educational Qualification and Experience	10th grade pass OR 8th grade pass with 2 Years of experience in port operations OR 5th grade pass with 5 Years of experience in port operations OR Previous relevant Qualification of NSQF Level (2) with 3 Years of experience in port operations
Pre-Requisite License or Training	NA
Minimum Job Entry Age	18 Years
Last Reviewed On	30/05/2024
Next Review Date	30/05/2027
NSQC Approval Date	30/05/2024
QP Version	1.0
Model Curriculum Creation Date	06/05/2024
Model Curriculum Valid Up to Date	30/05/2027
Model Curriculum Version	1.0
Minimum Duration of the Course	330
Maximum Duration of the Course	450

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:

- Describe the basic structure and function of supply chain
- Detail the various functions of a Junior cargo operator – Port Terminals/CFS/ICD
- Detail the steps involved in the planning process for cargo movement
- Demonstrate the steps to be followed for cargo stevedoring as per SOP
- Describe the automated technologies involved in cargo tallying
- Describe the tallying process
- Explain the concepts of integrity, ethics
- Detail the various regulatory requirements related to logistics industry
- Describe health, safety, and security procedures in port terminals, CFS and ICD
- 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
- Detail the steps to be followed for signalling for vessel and cargo movement
- Detail the various field activities to be performed in customs clearance

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
Bridge Module	**20**	**10**			**30**
Module 1: Introduction to Junior Cargo Operator – Port terminals/CFS/ICD	20	10			30
LSC/N3601 - Perform cargo movement V2.0 NSQF Level 3	**20**	**30**	**10**		**60**
Module 2: Cargo movement	20	30	10		60
LSC/N3602 - Perform stevedoring activities V2.0 NSQF Level 3	**20**	**30**	**10**		**60**
Module 3: Cargo Stevedoring	20	30	10		60

NOS and Module Details					
LSC/N3541 - Perform cargo tallying V1.0 NSQF Level 3	20	30	10		60
Module 4: Cargo Tallying	20	30	10		60
LSC/N9904 – Maintain integrity and ethics in operation V2.0 NSQF Level 3	10	20			30
Module 5: Guidelines on integrity and ethics	10	20			30
LSC/N9905 – Follow health, safety and security procedures V2.0 NSQF Level 3	20	40			60
Module 6: Compliance to health, safety and security norms	20	40			60
Employability Skills DGT/VSQ/N0101	15	15			30
Total Duration	125	175	30		330

Option Modules

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

Option 1: Signalman Activities

NOS and Module Details	Theory Duration	Practical Duration	On-the-Job Training Duration (Mandatory)	On-the-Job Training Duration (Recommended)	Total Duration
LSC/N3604 - Perform signalman activities V2.0 NSQF Level 3	30	30			60
Module 8: Signalling for vessel and cargo movement	30	30			60
Total Duration	30	30			60

Option 2: Customs Clearance

NOS and Module Details	Theory Duration	Practical Duration	On-the-Job Training Duration (Mandatory)	On-the-Job Training Duration (Recommended)	Total Duration
LSC/N2341 - Perform customs clearance field activities V2.0 NSQF Level 3	**30**	**30**			**60**
Module 9: Field activities in customs clearance	30	30			60
Total Duration	**30**	**30**			**60**

Module Details

Module 1: Introduction to Junior Cargo Operator – Port Terminals/CFS/ICD
Mapped to Bridge Module

Terminal Outcomes:

- Describe the basic structure and function of supply chain
- Detail the various functions of a Junior cargo operator – Port Terminals/CFS/ICD

Duration: *20:00*	**Duration**: *10:00*
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
- Classify the components of supply chain and logistics sector - Detail the various sub-sectors and the opportunities in them - Detail activities in Ports, CFS, ICD - Explain job roles in Ports, CFS, ICD - Detail your job role as Junior Cargo Operator and its interface with other job roles	- Identify various activities in Ports, CFS, ICD - Identify job roles in Ports, CFS, ICD - Identify the various MHEs and equipment used in Ports, CFS, ICD
Classroom Aids	
Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Board eraser	
Tools, Equipment and Other Requirements	
Computers with MS office, Scanners, system tools, printers	

Module 2: Cargo movement

Mapped to LSC/N3601, v2.0

Terminal Outcomes:

- Detail the steps involved in the planning process for cargo movement

Duration: *20:00*	Duration: *30:00*
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
- Explain different vessel and cargo types and berthing procedure - Detail cargo movement and its related rope work technique - Explain rigging procedure - Discuss the components of cargo movement - List the PPE used for cargo movement - Identify the appropriate signalling equipment	- Perform berthing procedure for different vessel and cargo - Demonstrate cargo movement and its corresponding rope work techniques - Demonstrate rigging techniques using related equipment - Select the appropriate PPE to be used for cargo movement - Maintain the cargo yard in clean and orderly manner - Use the appropriate equipment for cargo handling
Classroom Aids	
Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Board eraser	
Tools, Equipment and Other Requirements	
Computers with MS office, Ropes, VHF radio, flags, wires, locks, master-links, winches, MHEs, PPEs, SOP, Cargo handling equipment	

Module 3: Cargo Stevedoring
Mapped to LSC/N3602, V2.0

Terminal Outcomes:

- Demonstrate the steps to be followed for cargo stevedoring as per SOP

Duration: *20:00*	Duration: *30:00*
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
- Distinguish storage locations in yard - Identify hazardous goods - Discuss the rigging procedure - Describe hazardous cargo segregation and handling methods - Detail the lashing/unlashing procedure of cargo	- Identify markings and labels used in cargo movement - Demonstrate manual cargo movement techniques - Execute safe loading and unloading of goods from vessel - Perform lashing/unlashing of cargo and container as per lashing plan - Identify different MHEs - Demonstrate loading/ unloading using MHEs - Identify defects or malfunctioning of MHEs/ loading equipment
Classroom Aids	
Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Board eraser	
Tools, Equipment and Other Requirements	
Computers with MS office, Ropes, VHF radio, flags, wires, locks, master-links, winches, MHEs, PPEs, SOP, Cargo handling equipment	

Module 4: Cargo Tallying
Mapped to LSC/N3541, V1.0

Terminal Outcomes:

- Describe the automated technologies involved in cargo tallying
- Describe the tallying process

Duration: *20:00*	**Duration**: *30:00*
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
- Describe the automated technologies used for cargo tallying. - List the various cargo documents. - Detail the contents of a tally report. - Discuss the process of checking the condition of the cargo. - Explain how to prepare a tally report. - State the relevant regulations, national and international standards for handling the cargo. - Describe the process of maintaining the equipment used for cargo tallying and checking	- Demonstrate how to use the automated technologies for cargo tallying - Check if the quantity of the cargo matches with the cargo documents. - Prepare a tally sheet with the count and details of the cargo. - Communicate with other parties involved in cargo handling. - Follow the safety protocol while handing the cargo - Verify if the equipment is in working condition and troubleshoot problems if any.
Classroom Aids	
Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Board eraser	
Tools, Equipment and Other Requirements	
Computers with MS office, Scanners, system tools, sample reports	

Module 5: Guidelines on integrity and ethics
Mapped to LSC/N9904, v2.0

Terminal Outcomes:

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

Duration: *10:00*	**Duration**: *20:00*
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
- Describe the concepts of integrity, ethics - Detail the various regulatory requirements related to logistics industry - Explain data and information security practices - Discuss the code of conduct and etiquettes - Document all integrity and ethics violations - Explain escalation matrix for reporting deviation	- Practice the principles of integrity and ethics - Follow the various regulatory requirements related to logistics industry - Perform data and information security practices - Identify corrupt practices - Comply with regulatory requirements - Practice code of conduct and etiquettes - Report deviation as per the escalation matrix
Classroom Aids	
Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Board eraser	
Tools, Equipment and Other Requirements	
Computers with MS office, LLMS (learning version), SOP	

Module 6: Compliance to health, safety and security norms
Mapped to LSC/N9905, v2.0

Terminal Outcomes:

- Describe health, safety, and security procedures in port terminals, CFS and ICD
- 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

Duration: 20:00	Duration: 40:00
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
- Detail health, safety and security procedures in port terminals, CFS and ICD - Describe the 5S to be followed - Explain the inspection procedure to ensure appropriate and safe conditions of activity area and equipment - Detail unsafe working conditions - Describe the inspection procedure to check safe handling of hazardous goods - Discuss the standard protocol to be followed during emergency situations, accidents and breach of safety - Document health, safety and security violations - Explain the escalation matrix for reporting deviation	- Follow health, safety and security procedures in port terminals, CFS and ICD - Implement 5S at workplace - Inspect the activity area and equipment, for appropriate and safe conditions - Identify unsafe working conditions - Inspect adherence to standard operating procedures (SOP) while handling dangerous and hazardous goods - Implement standard protocol in case of emergency situations, accidents, and breach of safety - Prepare report on health, safety and security violations - Report deviation as per the escalation matrix
Classroom Aids	
Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Board eraser	
Tools, Equipment and Other Requirements	
Computers with MS office, LLMS (learning version), SOP, PPEs, MHEs.	

Module 7: 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.

Duration: *15:00*	Duration: *15:00*
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
- Detail the importance of Employability Skills in meeting the job requirements - Explain constitutional values, civic rights, duties, citizenship, responsibility towards society etc. that are required to be followed to become a responsible citizen. - Describe positive attitude, self -motivation, problem solving, time management skills and continuous learning mindset in different situations. - Discuss the significance of reporting sexual harassment issues in time - Appraise the significance of using financial products and services safely and securely. - Explain the importance of managing expenses, income, and savings. - Detail the significance of approaching the concerned authorities in time for any exploitation as per legal rights and laws - Discuss the significance of using internet for browsing, accessing social media platforms, safely and securely - Categorize the need for identifying opportunities for potential business, sources for arranging money and potential legal and financial challenges - Discuss the significance of maintaining hygiene and dressing appropriately - Discuss how to search and register for apprenticeship opportunities	- Analyze 21st century skills. - Practice appropriate basic English sentences/phrases while speaking - Demonstrate how to communicate in a well - mannered way with others. - Illustrate working with others in a team - Demonstrate how to conduct oneself appropriately with all genders and PwD - Operate digital devices and use the associated applications and features, safely and securely - Differentiate between types of customers - Create a biodata - Experiment with various sources to search and apply for jobs - Identify customer needs and address them - Compose the significance of dressing up neatly and maintaining hygiene for an interview

Classroom Aids
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

Module 8: Signalling for Vessel and Cargo Movement
Mapped to LSC/N3604, V2.0

Terminal Outcomes:

- Detail the steps to be followed for signalling for vessel and cargo movement

Duration: *30:00*	Duration: *30:00*
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
● Detail the signaling activities for vessel docking and cargo movement by cranes ● Describe standard material handling practices ● Detail the reports related to accident and damage	● Prepare loading/unloading documentation ● Demonstrate hand and rope signal communication ● Identify obstacles in cargo movement route ● Perform the signal activities for cargo movement ● Prepare incident reports related to accidents and damages
Classroom Aids	
Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Board eraser	
Tools, Equipment and Other Requirements	
Computers with MS office, Ropes, VHF radio, flags, wires, locks, master-links, winches, MHEs, PPEs, SOP	

Module 9: Field Activities in Customs Clearance
Mapped to LSC/N2341, V2.0

Terminal Outcomes:

- Detail the various field activities to be performed in customs clearance

Duration: _30:00_	Duration: _30:00_
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
- Describe customs clearance process - Elaborate customs documentation - Detail packaging requirements as per regulatory - Describe loading and unloading process for different types of cargo - Detail the reports related to cargo movement	- Perform custom clearance as per SOP - Prepare customs documentation as per SOP - Perform packaging as per regulatory standards - Perform loading and unloading of different type of cargo - Allocate manpower and MHE budget for cargo movement - Identify the right MHE to use for different cargo types - Prepare daily reports related to cargo movement
Classroom Aids	
Charts, Models, Video presentation, Flip Chart, Whiteboard/Smart Board, Marker, Board eraser	
Tools, Equipment and Other Requirements	
Computers with MS office, SOP, customs documentation formats, IT/ERP system, MHEs	

Annexure

Trainer Requirements

Trainer Prerequisites					
Minimum Educational Qualification	**Specialization**	**Relevant Industry Experience**		**Training Experience**		**Remarks**
		Years	*Specialization*	*Years*	*Specialization*	
Any degree	Port terminals/CFS/ICD	2	Port terminals/CFS/ICD			

Trainer Certification	
Domain Certification	**Platform Certification**
Certified for Job Role: "Junior Cargo Operator – Port Terminals/CFS/ICD" mapped to QP: "LSC/Q3515, v1.0". 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*	
Any degree	Port terminals/CFS/ICD	2	Port terminals/CFS/ICD			

Assessor Certification	
Domain Certification	**Platform Certification**
Certified for Job Role: "Junior Cargo Operator – Port Terminals/CFS/ICD" mapped to QP: "LSC/Q3515, v1.0". 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
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

Term	Description
QP	Qualification Pack
NSQF	National Skills Qualification Framework
NSQC	National Skills Qualification Committee
NOS	National Occupational Standards