



Model Curriculum

QP Name: Packing Machine Operator - Food Industry

QP Code: FIC/Q7002

Version: 4.0

NSQF Level: 3.0

Model Curriculum Version: 4.0

Food Industry Capacity & Skill Initiative || Shriram Bharatiya Kala kendra, 3rd floor, 1, Copernicus Marg,
Mandi House, New Delhi

Delhi 110001 || email: admin@ficsi.in

Table of Contents

Contents

Training Parameters.....	3
Program Overview	4
Training Outcomes.....	4
Compulsory Modules	4
Module 1: Introduction to the sector and job role of Packing Machine Operator - Food Industry	6
Module 2: Preparation for Operating the Different Types of Food Packing Machines.....	7
Module 3: Organizational Standards and Norms.....	9
Module 4: Operating Different Types of Packing Machines for Various Food Products.....	10
Module 5: Carrying Out Post-Production Activities.....	13
Module 6: Implement Personal Hygiene and Good Manufacturing Practices	14
Module 7: Apply Food Safety Practices at Workplace.....	16
Module 8: Employability Skills (30 Hours)	18
Module 9: On-the-Job Training	20
Annexure.....	21
Trainer Requirements	21
Assessor Requirements.....	22
Assessment Strategy.....	23
References	25
Glossary.....	25
Acronyms and Abbreviations.....	26

Training Parameters

Sector	Food Processing
Sub-Sector	Fruits and Vegetables, Food Grain Milling, Dairy Products, Meat and Poultry, Fish and Sea Food, Bread and Bakery, Alcoholic Beverages, Soya Food, Packaged Foods
Occupation	Packaging
Country	India
NSQF Level	3
Aligned to NCO/ISCO/ISIC Code	NC0-2015/3122.4100
Minimum Educational Qualification and Experience	10th or Equivalent OR 8th-grade pass with 3-year of experience in food processing OR Previous relevant Qualification of NSQF Level 2.0 with 3-year of experience in food processing OR Previous relevant qualification of NSQF Level 2.5 with 1.5-year of experience in food processing
Pre-Requisite License or Training	NA
Minimum Job Entry Age	16 Years
Last Reviewed On	22-10-2024
Next Review Date	21-10-2027
NSQC Approval Date	22-10-2024
QP Version	4.0
Model Curriculum Creation Date	22-10-2024
Model Curriculum Valid Up to Date	21-10-2027
Model Curriculum Version	4.0
Minimum Duration of the Course	300 Hours
Maximum Duration of the Course	300 Hours

Program Overview

This section summarises 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 to:

- Explain how to prepare to operate different types of food-packing machines
- Show how to operate different types of packing machines for various food products.
- Discuss the basic health and safety practices to be followed at a food processing workplace.
- Discuss the Employability and Entrepreneurship Skills.

Compulsory Modules

The table lists the modules and their duration corresponding to the Compulsory NOS of the QP.

NOS and Module Details	Theory Duration (Hours)	Practical Duration (Hours)	On-the-Job Training Duration (Mandatory) (Hours)	On-the-Job Training Duration (Recommended) (Hours)	Total Duration (Hours)
FIC/N7025: Prepare to Operate Different Types of Food Packing Machines NOS Version No.: 1.0 NSQF Level: 3.0	20:00	40:00	00:00	00:00	60:00
Module 1: Introduction to the Sector and the Job Role of a Packing Machine Operator-Food Industry	05:00	00:00	00:00	00:00	05:00
Module 2: Preparation for Operating the Different Types of Food Packing Machines	15:00	40:00	00:00	00:00	55:00
FIC/N7024: Operate Different Types of Packing Machines for various Food Products NOS Version No.: 2.0 NSQF Level: 3.0	30:00	90:00	60:00	00:00	180:00
Module 3: Organizational Standards and Norms	05:00	10:00	15:00	00:00	30:00
Module 4: Operating Different Types of Packing Machines for Various Food Products	20:00	70:00	30:00	00:00	120:00
Module 5: Carrying Out Post-Production Activities	05:00	10:00	15:00	00:00	30:00

FIC/N9906: Apply food safety guidelines in Food Processing NOS Version No.: 1.0 NSQF Level: 2	10:00	20:00	00:00	00:00	30:00
Module 6: Implement Personal Hygiene and Good Manufacturing Practices	05:00	10:00	00:00	00:00	15:00
Module 7: Apply food safety practices at workplace	05:00	10:00	00:00	00:00	15:00
DGT/VSQ/N0101: Employability Skills (30 Hours) NOS Version No.: 1.0 NSQF Level: 2	30:00	00:00	00:00	00:00	30:00
Module 8: Employability Skills (30 Hours)	30:00	00:00	00:00	00:00	30:00
Total Duration	90:00	150:00	60:00	00:00	300:00

Module Details

Module 1: Introduction to the sector and job role of Packing Machine Operator - Food Industry

Mapped to FIC/N7025, v1.0

Terminal Outcomes:

- Explain the importance of Food Processing Industry.
- Discuss the roles and responsibilities of a Packing Machine Operator- Food Industry.

Duration (in hours): 05:00	Duration (in hours): 00:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Define food processing. • Describe the various sub-sectors of food processing industry and packaging materials used for each of these sub-sectors • Discuss the scope of employment in the food processing industry. • Explain the need for a Packing Machine Operator- Food Industry in the food processing sector. • List the key roles and responsibilities of a Packing Machine Operator- Food Industry. 	
Classroom Aids	
Training Kit - Facilitator's Guide, Participant's Handbook, Presentations and Software, Whiteboard, Marker, Projector, Laptop, Video Films	
Tools, Equipment and Other Requirements	
Nil	

Module 2: Preparation for Operating the Different Types of Food Packing Machines

Mapped to FIC/N7025, v1.0

Terminal Outcomes:

- Explain how to check the availability of resources for food packing.
- Describe the steps involved in preparing the packing machine for operation.
- Discuss the procedure for performing a test run of the packing machine.

Duration (in hours): 15:00	Duration (in hours): 40:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Describe how different types of packing machines work, including their specific components and operational mechanisms. • Explain the working mechanism, use, regular maintenance, fault rectification, and basic repair for primary packaging machines like Vertical Form Fill Seal (VFFS), Horizontal Form Fill Seal (HFFS), thermoforming, and vacuum packing machines. • Discuss the working mechanism, use, regular maintenance, fault rectification, and basic repair for secondary packaging machines such as the cartoning machine, case packing machine, tray packing machine, shrink wrap machines, etc. • Elucidate the working mechanism, use, regular maintenance, fault rectification, and basic repair for tertiary packaging machines like palletizing machine, strapping machine, etc. • Explain the different types of materials used with various packing machinery. • Discuss the advantages and disadvantages of using different types of packing machines for packing processed food products. • Explain the electrical systems used to manage power connections and troubleshoot electrical problems in packing machines. • Describe the different types of plastics, metals, and other materials used in food packaging. 	<ul style="list-style-type: none"> • Demonstrate how to determine the packing material requirements. • Show how to check the availability of relevant packing equipment and packaging materials. • Demonstrate how to check if the packaging material meets the applicable specifications and quality standards. • Demonstrate how to set up and calibrate packing machines according to the type of packing machine being used and the food product being packed. • Show how to check for the availability of necessary tools and equipment to attend to faults in case of packing machine breakdowns. • Demonstrate how to carry out basic repair and maintenance of the packing machinery. • Show the emergency stop procedures and how to handle equipment malfunctions safely. • Show how to conduct for complex repair and maintenance needs by coordinating with the supervisor. • Demonstrate how to check that the packing machine operating environment meets the necessary conditions such as temperature and humidity. • Show how to load the packing material in the packing machine, align it properly, and set the appropriate machine parameters, depending on the type of packing machine being used.

<ul style="list-style-type: none"> • Discuss the Standard Operating Procedures (SOPs) for starting, running, and shutting down packing machines. • Explain the industry safety standards and regulations, including occupational health and safety guidelines, relevant to packing machines. • Explain the importance of following machine manuals and operational guidelines provided by manufacturers. • Determine the different resources required for the packing of processed food products. • Discuss proper sanitation practices to prevent contamination of food products during packing. • Explain how Hazard Analysis and Critical Control Points (HACCP) apply to food packing operations. 	<ul style="list-style-type: none"> • Demonstrate the techniques used to inspect packaging for quality assurance, ensuring that all packages meet the required standards. • Show how to identify and rectify common packing errors such as misalignment, incorrect sealing, or labelling issues. • Demonstrate how to conduct a test run to verify that the product is being packed and sealed correctly and adjust the packing machine settings, as required, based on the test. • Demonstrate the routine maintenance tasks to prevent breakdowns and prolong the life of packing machines. • Show how to assist in maintaining records of machine settings and any issues encountered during the setup.
Classroom Aids	
<p>Training Kit - Facilitator’s Guide, Participant’s Handbook, Presentations and Software, Whiteboard, Marker, Projector, Laptop, Video Films</p>	
Tools, Equipment and Other Requirements	
<p>Work Uniforms, Protective Head and Hair Covering, Safety and Waterproof Footwear, Containers for Storing Packed Food, Utensils for Handling Food, Hand Tools (e.g., Wrenches, Screwdrivers for Machine Adjustments, etc.), Lifting Aids, Eye and Facial Protection, Coats and Aprons, Protective Hand and Arm Coverings, Processing Unit (Machine Specific), Conveyor and Processing Belts, Ear Plugs or Muffs, Mesh Aprons, Containers, Weighing Scale, Packaging Material</p>	

Module 3: Organizational Standards and Norms

Mapped to FIC/N7024, v2.0

Terminal Outcomes:

- Explain the different organizational standards and norms applicable in primary, secondary and tertiary packaging of food products.

Duration (in hours): 05:00	Duration (in hours): 10:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Discuss the FSSAI food safety standards and regulations. • Explain the basic food microbiology. • Describe the environmental requirements for the packing of different processed food items. • Explain the Good Manufacturing Practices (GMPs) concerning food products, including the use of relevant protective equipment. • Discuss the purpose and principles of the packaging process. • Elucidate the safety and hygiene precautions for the packing operation of various types of processed food items. 	<ul style="list-style-type: none"> • Show how to check the packaging area is clean and organised to maintain food safety standards. • Demonstrate how to check the packaging area is clean and organized to maintain food safety standards. • Show how to ensure Clean-out-of-Place (COP) equipment components are assembled properly. • Demonstrate how to sterilize relevant equipment, such as Ultra-high Temperature (UHT) units, before using them for packing operations. • Show how to sterilize containers before using them for packing food products. • Demonstrate the quality assessment of processed food products based on different parameters. • Show how to check the quality criteria required before packing various types of processed food items, including the packing materials. • Demonstrate how to check the quality parameters during and after packing to ensure adherence to packaging standards.
Classroom Aids	
Training Kit - Facilitator's Guide, Participant's Handbook, Presentations and Software, Whiteboard, Marker, Projector, Laptop, Video Films	
Tools, Equipment and Other Requirements	
NA	

Module 4: Operating Different Types of Packing Machines for Various Food Products

Mapped to FIC/N7024, v2.0

Terminal Outcomes:

- Explain how to carry out primary packaging of food products
- Discuss how to carry out secondary packaging of food products
- Explain how to carry out tertiary packaging of food products
- Show how to carry out post-production activities.

Duration (in hours): 20:00	Duration (in hours): 70:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Describe different types of packaged processed food items. • Explain processed food product packaging materials like boxes, cans, paper, cardboard, and bottles. • Discuss handling requirements for various packaging materials. • Elucidate storage and inventory procedures for continuous packaging supply. • Explain the different types of primary packaging materials, such as sheets, boxes, cans, plastic rolls, paper, cardboard, cloth, metal, bottles, etc. • Elucidate the various types of secondary packaging materials, including corrugated cardboard, shrink wrap film, stretch wrap film, paperboard, plastic containers, etc. • Discuss the diversity of tertiary packaging materials, such as wooden/plastic/metal pallets, stretch wrap film, shrink wrap film, Polypropylene (PP)/Polyester (PET)/steel straps, paperboard edge protectors, plastic corner boards, etc. • Explain operating different processed food packing machines and controls. • Discuss basic calculations for packing materials needed per order. • Explain operating different processed food packing machines and controls. • Discuss basic calculations for packing 	<ul style="list-style-type: none"> • Demonstrate how to feed food products and primary packaging materials (sheets, boxes, cans, plastic rolls, cardboard, bottles) to the packaging machine. • Show how to fill packaging materials with food products. • Demonstrate how to seal/cap filled packaging material following the packing machine user guidelines. • Show how to regulate the speed of packaging to ensure efficient packing operations. • Demonstrate how to monitor the temperature of food products during packing to ensure they are packed at safe temperatures to maintain their quality. • Demonstrate cleaning and labeling of filled primary packaging. • Show how to check and test packaged food products for integrity as per guidelines. • Demonstrate identifying, segregating, and labeling non-standard materials and packages. • Demonstrate maintaining packing material supply during production. • Show how to identify and report discrepancies and issues to the supervisor. • Show how to hand over standard and non-standard packed products according to operational guidelines, minimizing

materials needed per order.

- Elucidate procedures for obtaining and managing food items and packing materials.
- Explain loading, positioning, and feeding processes in packing machines.
- Discuss packing machine operating parameters and their impact.
- Describe entering operating parameters into packing machines.
- Explain the importance of sample inspection before production.
- Discuss the sequence of operations for packing machines.
- Explain the operations of different packing machines, such as form, fill, seal machines, auger filling, band sealer, etc.
- Discuss the importance of maintaining the appropriate temperature and humidity for the proper functioning of packing machines.

damage.

- Demonstrate shutting down the production line during emergencies as per procedures.
- Show how to use food-grade secondary packaging that meets safety standards.
- Demonstrate how to collect necessary secondary packaging materials and tools, like corrugated cardboard, shrink wrap film, stretch wrap film, paperboard, plastic containers, and tools.
- Show how to check primary packaged items for correct sealing and labelling, group them as instructed, and pack them into secondary packaging.
- Demonstrate how to seal secondary packaging using appropriate methods.
- Show how to label secondary packaging with required information (e.g., product details, batch number, expiration date) and secure packaged items accordingly.
- Demonstrate how to inspect finished secondary packaging for defects or issues and take corrective measures as instructed.
- Show how to check that primary packages are grouped and packed appropriately in secondary packaging.
- Demonstrate how to set parameters in the tertiary packing machine and feed tertiary packaging materials and secondary packed products into the machine.
- Show how to load secondary packed products onto the packaging line conveyor, set controls, start, stop, and regulate conveyor speed for bulk tertiary packaging of cartons.
- Demonstrate how to safely remove tertiary packed products from the packaging machine.
- Show how to weigh packed products after tertiary packaging to ensure correct weight.
- Demonstrate how to examine tertiary packaging materials for damage and take necessary corrective measures.

Classroom Aids

Training Kit - Facilitator's Guide, Participant's Handbook, Presentations and Software, Whiteboard, Marker, Projector, Laptop, Video Films

Tools, Equipment and Other Requirements

Work Uniforms, Protective Head and Hair Covering, Safety and Waterproof Footwear, Containers for Storing Packed Food, Utensils for Handling Food, Hand Tools (e.g., Wrenches, Screwdrivers for Machine Adjustments, knives, scoops, etc.), Lifting Aids, Eye and Facial Protection, Coats and Aprons, Protective Hand and Arm Coverings, Processing Unit (Machine Specific), Conveyor and Processing Belts, Ear Plugs or Muffs, Mesh Aprons, Containers, Weighing Scale, Packaging Material, Bag Sealer, Box Former and Closer, Coding and Marking Machine, Wrapping Machines

Module 5: Carrying Out Post-Production Activities

Mapped to FIC/N7024, v2.0

Terminal Outcomes:

- Show how to carry out post-production activities.

Duration (in hours): 05:00	Duration (in hours): 10:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Elucidate quality parameters checked during and after packing. • Discuss safety and hygiene precautions in packing operations. • Explain contamination risks in packaging processes and control measures. • Describe monitoring and maintaining packing material levels in machines. • Discuss emergency and routine shutdown procedures for packing machines. • Explain environmental regulations for packaging material disposal. • Discuss importance and process of maintaining accurate records in food processing. 	<ul style="list-style-type: none"> • Show how to store packaged products in a pest-controlled environment, maintaining appropriate temperature and humidity, and handle packages safely using suitable equipment to prevent damage. • Demonstrate how to clean packing machinery and tools using recommended cleaning agents and sanitizers. • Show how to follow the clean-in-place procedure to clean the work area after packaging operations, removing dust, spillage, pests, etc. • Show how to ensure periodic maintenance of all machinery and equipment according to manufacturer’s instructions/manuals. • Show how to carry out appropriate documentation concerning the packing machine operations.
Classroom Aids	
Training Kit - Facilitator’s Guide, Participant’s Handbook, Presentations and Software, Whiteboard, Marker, Projector, Laptop, Video Films	
Tools, Equipment and Other Requirements	
Work Uniforms, Protective Head and Hair Covering, Safety and Waterproof Footwear, Containers for Storing Packed Food, Utensils for Handling Food, Hand Tools (e.g., Wrenches, Screwdrivers for Machine Adjustments, knives, scoops, etc.), Lifting Aids, Eye and Facial Protection, Coats and Aprons, Protective Hand and Arm Coverings, Processing Unit (Machine Specific), Conveyor and Processing Belts, Ear Plugs or Muffs, Mesh Aprons, Containers, Weighing Scale, Packaging Material, Bag Sealer, Box Former and Closer, Coding and Marking Machine, Wrapping Machines	

Module 6: Implement Personal Hygiene and Good Manufacturing Practices

Mapped to FIC/N9906, v1.0

Terminal Outcomes:

- Discuss the importance of personal hygiene and GMP at the workplace
- Demonstrate the tasks to be performed for ensuring personal hygiene and GMP practices at the workplace.

Duration (in hours): 05:00	Duration (in hours): 10:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Define hazards and risks. • Discuss the various types of health and safety equipment available in an organisation and the methods for obtaining them. • Discuss the organisational health and safety policies and procedures. • Discuss site relevant documented procedure for Personal Hygiene and Visitor/ Contractor rules. • Explain work instructions at levels of employee inside a food manufacturing site. • Discuss how to conduct timely planning and participation of relevant training and awareness sessions on personal hygiene, GMP and related topics. • Explain the importance of timely medical examination from a prescribed and authorized doctor and to comply with the guidelines of Schedule IV as described in Food Safety Standard Authority of India (FSSAI) guidelines. • State how to follow a site relevant documented procedure and area wise work instructions for Good Manufacturing Practices (GMP) to be followed on the site. • List validated Do's & Don'ts inside a food manufacturing firm. 	<ul style="list-style-type: none"> • Demonstrate the steps to be performed for implementing good manufacturing practices (GMP). • Demonstrate how to follow work instructions at levels of employee inside a food manufacturing site and ensure that the relevant instructions are well communicated and being followed at the fixed timelines. • Show how to fill data in daily monitoring checklist related to personal hygiene, food safety and GMP. • Demonstrate the process to follow man and materials movement throughout the production facility, to restrict unwanted hazards to cross contaminate the products which are being manufactured in the facility. • Show how to tag and number all the equipment, machinery, tools, and other processing aids to keep a proper traceability of the product being manufactured and handled at site. • Demonstrate process of record keeping and documentation such as Daily Monitoring Sheets, Batch Traceability Records, machine records, product parameters, process control parameters etc.

<ul style="list-style-type: none"> • State process flow charts, HACCP summary plan and critical process parameters in each and respective areas of the production line. • Explain how to identify the material requirements such as manufacturing equipment's, Utensils and other processing aids, cleaning chemicals, cleaning work instructions in all the relevant areas of manufacturing facility. • Define the Allergens, their risks and the allergen requirements. • State the relevance of guidelines in manufacturing area and how training evaluation will be implemented. • Explain the process of audits and ways to address the aspects of Good Manufacturing Procedures, personal hygiene and food safety. 	
Classroom Aids	
Training Kit - Facilitator's Guide, Participant's Handbook, Presentations and Software, Whiteboard, Marker, Projector, Laptop, Video Films	
Tools, Equipment and Other Requirements	
GMP format and guidelines, allergen manual, personal hygiene guidelines, etc.	

Module 7: Apply Food Safety Practices at Workplace

Mapped to FIC/N9906, v1.0

Terminal Outcomes:

- List the food safety practices at the workplace and the ways to implement them.
- Demonstrate the steps to be followed to implement food safety procedures effectively.

Duration (in hours): 05:00	Duration (in hours): 10:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • List the various types of health and safety hazards present in the environment. • Discuss the possible causes of risk, hazard or accident at the workplace. • Elucidate the standard practices and precautions used to control and prevent risks, hazards and accidents at the workplace. • Explain requirements to maintain updated facilities, equipment and tool to minimize the risks associated with the products being handled at the site. • State the importance of using protective equipment and clothing for specific tasks and work conditions. • Discuss the role of organisational protocols in preventing accidents and hazards. • Discuss the significance of various types of hazard and safety signs. • Explain FSSAI Schedule IV requirements related to: Pest Control, Cleaning and Sanitation, Utilities, Waste Disposal, Prevention of Cross Contamination, allergen management, corrective action, preventive actions, food operation control etc. • Discuss the relevance of checking critical control points and product parameters. • Explain importance of record keeping and documentation such as daily monitoring 	<ul style="list-style-type: none"> • Show how to apply appropriate techniques to deal with hazards safely and appropriately. • Demonstrate the steps for checking critical control points and product parameters. • Show how to record keeping and documentation such as daily monitoring sheets, cleaning sheets, parameters etc. • Demonstrate appropriate ways to respond to an accident situation or medical emergency promptly and appropriately. • Demonstrate the steps to be followed during emergency and evacuation procedure.

<p>sheets, cleaning sheets, parameters etc.</p> <ul style="list-style-type: none"> • Discuss how to report any food safety and GMP issue to supervisor, if any. 	
<p>Classroom Aids</p>	
<p>Training Kit - Facilitator’s Guide, Participant’s Handbook, Presentations and Software, Whiteboard, Marker, Projector, Laptop, Video Films</p>	
<p>Tools, Equipment and Other Requirements</p>	
<p>Helmet, gloves, rubber mat, ladder, neon tester, leather or asbestos gloves, flame proof aprons, flame proof overalls buttoned to neck, cuff less (without folds) trousers, reinforced footwear, helmets/hard hats, cap and shoulder covers, ear defenders/plugs, safety boots, knee pads, particle masks, glasses/goggles/visors, hand and face shields, machine guards, residual current Devices, shields, dust sheets, respirator.</p>	

Module 8: Employability Skills (30 Hours)

Mapped to DGT/VSQ/N0101, v1.0

Duration: 30:00

Key Learning Outcomes

Introduction to Employability Skills Duration: 1 Hour

After completing this programme, participants will be able to:

1. Discuss the importance of Employability Skills in meeting the job requirements

Constitutional values - Citizenship Duration: 1 Hour

2. Explain constitutional values, civic rights, duties, citizenship, responsibility towards society etc. that are required to be followed to become a responsible citizen.
3. Show how to practice different environmentally sustainable practices

Becoming a Professional in the 21st Century Duration: 1 Hour

4. Discuss 21st-century skills.
5. Display a positive attitude, self-motivation, problem-solving, time management skills and continuous learning mindset in different situations.

Basic English Skills Duration: 2 Hours

6. Use appropriate basic English sentences/phrases while speaking

Communication Skills Duration: 4 Hours

7. Demonstrate how to communicate in a well-mannered way with others.
8. Demonstrate working with others in a team

Diversity & Inclusion Duration: 1 Hour

9. Show how to conduct oneself appropriately with all genders and PwD
10. Discuss the significance of reporting sexual harassment issues in time

Financial and Legal Literacy Duration: 4 Hours

11. Discuss the significance of using financial products and services safely and securely.
12. Explain the importance of managing expenses, income, and savings.
13. Explain the significance of approaching the concerned authorities in time for any exploitation as per legal rights and laws

Essential Digital Skills Duration: 3 Hours

14. Show how to operate digital devices and use the associated applications and features, safely and securely
15. Discuss the significance of using the internet for browsing, and accessing social media platforms, safely and securely

Entrepreneurship Duration: 7 Hours

16. Discuss the need for identifying opportunities for potential business, sources for arranging money and potential legal and financial challenges

Customer Service Duration: 4 Hours

17. Differentiate between types of customers

18. Explain the significance of identifying customer needs and addressing them

19. Discuss the significance of maintaining hygiene and dressing appropriately

Getting ready for Apprenticeship & Jobs Duration: 2 Hours

20. Create a biodata

21. Use various sources to search and apply for jobs

22. Discuss the significance of dressing up neatly and maintaining hygiene for an interview

23. Discuss how to search and register for apprenticeship opportunities

Module 9: On-the-Job Training

Mapped to Packing Machine Operator - Food Industry

Mandatory Duration: 60:00	Recommended Duration: 00:00
Location: On-Site	
Terminal Outcomes <ul style="list-style-type: none"> • Show how to explain the roles and responsibilities of a Packing Machine Operator-Food Industry. • Demonstrate how to check the availability of resources for food packing. • Show how to prepare the packing machine for operation. • Demonstrate how to perform a test run of the packing machine. • Show how to apply organizational standards and norms for primary, secondary, and tertiary packaging of food products. • Demonstrate how to carry out primary packaging of food products. • Show how to carry out secondary packaging of food products. • Demonstrate how to carry out tertiary packaging of food products. • Show how to perform post-production activities. 	

Annexure

Trainer Requirements

Trainer Prerequisites						
Minimum Educational Qualification	Specialisation	Relevant Industry Experience		Training Experience		Remarks
		Years	Specialization	Years	Specialization	
M.Sc/M.Tech/M.E.	Food Technology or Food Engineering	2	Food processing industry	1	Training of packaging technicians	
B.Sc or Graduate in food or allied sector/ B.Tech/B.E.	Food Technology or Food Engineering	3	Food processing industry	1	Training of packaging technicians	
Diploma	Food Technology/ Food Engineering/ Packaging allied sector	4	Food processing industry	1	Training of packaging technicians	

Trainer Certification	
Domain Certification	Platform Certification
Certified for Job Role: "Packing Machine Operator-Food Industry" mapped to QP: "FIC/Q7002, v4.0". 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". The minimum accepted score as per MEPS guidelines is 80%.

Assessor Requirements

Assessor Prerequisites						
Minimum Educational Qualification	Specialization	Relevant Industry Experience		Training/Assessment Experience		Remarks
		Years	Specialization	Years	Specialization	
B. Sc./ Diploma	Hotel management/ Food Technology/ Home Science	3	Food Technology/ Food Engineering/ Packaging Technology	3	Assessment of packing machine workers	
B.Tech./B.E.	Food Technology/ Food Engineering/ Packaging Technology	2	Food Processing	2	Assessment of packing machine workers	
M.Sc./M.E./ M.Tech.	Food Technology/ Food Engineering/ Packaging Technology/ Dairy Technology	1	Food Processing	1	Assessment of packing machine workers	
MBA	Agri Business Management/ FTM	1	Food Technology/ Food Engineering/ Packaging Technology	1	Assessment of packing machine workers	

Assessor Certification	
Domain Certification	Platform Certification
Certified for Job Role: "Packing Machine Operator-Food Industry" mapped to QP: "FIC/Q7002, v4.0". Minimum accepted score is 80%.	Certified for the Job Role: "Assessor (VET and Skills)", mapped to the Qualification Pack: "MEP/Q2701, v2.0", with a minimum score of 80%.

Assessment Strategy

This section includes the processes involved in identifying, gathering and interpreting information to evaluate the learner on the required competencies of the program.

Assessment will be based on the concept of Independent Assessors empanelled with Assessment Agencies, identified, selected, trained and certified on Assessment techniques. These Assessors would be aligned to assess as per the laid down criteria.

Assessment Agency would conduct assessment only at the training centres of Training Partner or designated testing centres authorized by FICSI.

Ideally, the assessment will be a continuous process comprising of three distinct steps:

- A. Mid-term assessment
- B. Term/Final Assessment

Each National Occupational Standard (NOS) in the respective QPs will be assigned weightage. There in each Performance Criteria in the NOS will be assigned marks for theory and/or practical based on relative importance and criticality of function.

This will facilitate preparation of question bank / paper sets for each of the QPs. Each of these papers sets/question banks created by the Assessment Agency will be validated by the industry subject matter experts through FICSI, especially with regard to the practical test and the defined tolerances, finish, accuracy etc.

The following tools are proposed to be used for final assessment:

- i. Written Test: This will comprise of (i) True/False Statements, (ii) Multiple Choice Questions, (iii) Matching Type Questions. Online system for this will be preferred.
- ii. Practical Test: This will comprise a test job to be prepared as per project briefing following appropriate working steps, using necessary tools, equipment and instruments. Through observation it will be possible to ascertain candidate's aptitude, attention to details, quality consciousness etc. The end product will be measured against the pre-decided MCQ filled by the Assessor to gauge the level of his skill achievements.
- iii. Structured Interview: This tool will be used to assess the conceptual understanding and the behavioural aspects as regards the job role and the specific task at hand.

On the Job:

1. Each module (which covers the job profile of a Packing Machine Operator-Food Industry) will be assessed separately.

2. The candidate must score 50% in each module to successfully complete the OJT.

3. Tools of Assessment that will be used for assessing whether the candidate is having desired skills and etiquette of dealing with customers, understanding needs & requirements, assessing the customer and perform Soft Skills effectively:

- Videos of Trainees during OJT
- Answer Sheets of Question Banks
- Assessing the Logbook entries of Trainees at Employer location
- Employer Performance Feedback.

4. Assessment of each Module will ensure that the candidate is able to:

- Operate different types of food packing machines as per production requirements.
- Perform packaging operations for various food products as per standard procedures.
- Implement food safety guidelines in food processing.
- Apply employability skills to enhance workplace productivity and professionalism.

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 it 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
NCVET	National Council for Vocational Education and Training
FICSI	Food Industry Capacity & Skill Initiative
QP	Qualification Pack
MC	Model Curriculum
NSQF	National Skills Qualification Framework
NSQC	National Skills Qualification Committee
NOS	National Occupational Standards
NCO	National Classification of Occupations
ES	Employability Skills
HACCP	Hazard Analysis and Critical Control Points
FSSAI	Food Safety and Standards Authority of India
GMPs	Good Manufacturing Practices
PPE	Personal Protective Equipment
VFFS	Vertical Form Fill Seal
HFFS	Horizontal Form Fill Seal