



# Model Curriculum

**QP Name: Artisanal Cheese Maker- Entrepreneur**

**QP Code: FIC/Q2008**

**QP Version: 1.0**

**NSQF Level: 4**

**Model Curriculum Version: 1.0**

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## Training Parameters

<b>Sector</b>	Food Processing
<b>Sub-Sector</b>	Dairy Products
<b>Occupation</b>	Processing-Dairy Products
<b>Country</b>	India
<b>NSQF Level</b>	4
<b>Aligned to NCO/ISCO/ISIC Code</b>	NCO-2015/7513.0400
<b>Minimum Educational Qualification and Experience</b>	1. Graduate in any stream 2. Class 12th passed in any stream with 1 year of food processing experience 3. Class 10th passed and 2 years course in any stream and 1 Year of Experience 4. Class 10th passed and 2 years of relevant experience 5. Class 10th Pass and 2 years of ITI and 1 year of experience
<b>Pre-Requisite License or Training</b>	NA
<b>Minimum Job Entry Age</b>	18 years
<b>Last Reviewed On</b>	25/11/2021
<b>Next Review Date</b>	24/11/2024
<b>NSQC Approval Date</b>	25/11/2021
<b>QP Version</b>	1.0
<b>Model Curriculum Creation Date</b>	25/11/2021
<b>Model Curriculum Valid Up to Date</b>	24/11/2024
<b>Model Curriculum Version</b>	1.0
<b>Minimum Duration of the Course</b>	450 Hours
<b>Maximum Duration of the Course</b>	450 Hours

## Program Overview

This section summarizes the end objectives of the program along with its duration.

### Training Outcomes

At the end of the program, the participants will be able to:

- Perform the tasks of establishing new or a reworked facility for artisanal food production
- Perform various tasks to plan and organize cheese production
- Apply appropriate practices to implement the standards and procedures at the work place
- Perform the tasks of processing, wrapping, storing, and packaging of various types of cheese as per the standards
- Follow standard procedures to ensure food safety
- Apply necessary health and safety practices to ensure workplace health and safety
- Work effectively with others
- Use resources at the workplace optimally

### 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>04:00</b>	<b>00:00</b>	<b>00:00</b>	<b>00:00</b>	<b>04:00</b>
Module 1: Introduction to Food Processing Sector and the Job of 'Artisanal Cheese Maker-Entrepreneur'	04:00	00:00	00:00	00:00	04:00
<b>FIC/N9905 – Establish Facilities for Artisanal Food Production</b> <b>NOS Version No. 1.0</b> <b>NSQF Level 5</b>	<b>50:00</b>	<b>64:00</b>	<b>00:00</b>	<b>00:00</b>	<b>114:00</b>
Module 2: Comply with Legislative Guidelines for a Production Facility	16:00	06:00	00:00	00:00	22:00
Module 3: Develop Recipes for Artisanal Production	08:00	16:00	00:00	00:00	24:00
Module 4: Selection of vendors for obtaining materials	02:00	02:00	00:00	00:00	04:00
Module 5: Perform entrepreneurial activities	24:00	40:00	00:00	00:00	64:00
<b>FIC/N2027 – Prepare for Artisanal Cheese Production</b>	<b>32:00</b>	<b>54:00</b>	<b>00:00</b>	<b>00:00</b>	<b>86:00</b>

<b>NOS Version No. 1.0</b>					
<b>NSQF Level 4</b>					
Module 6: Recognise and Identify Product Types	08:00	12:00	00:00	00:00	20:00
Module 7: Plan for Cheese Production Activities	08:00	18:00	00:00	00:00	26:00
Module 8: Maintain Work Area and Production Tools	08:00	12:00	00:00	00:00	20:00
Module 9: Establish Materials Flow Protocol	08:00	12:00	00:00	00:00	20:00
<b>FIC/N2028 - Carry out Artisanal Production of Cheese</b>	<b>40:00</b>	<b>88:00</b>	<b>00:00</b>	<b>00:00</b>	<b>128:00</b>
<b>NOS Version No. 1.0</b>					
<b>NSQF Level 4</b>					
Module 10: Prepare Milk and Produce Lactic Acid Coagulated Cheese	08:00	16:00	00:00	00:00	24:00
Module 11: Produce Rennet Based Coagulated Cheese	06:00	16:00	00:00	00:00	22:00
Module 12 : Produce Acid and Heat Coagulated Cheese	06:00	16:00	00:00	00:00	22:00
Module 13: Perform Monitoring Activities during Cheese Production	04:00	08:00	00:00	00:00	12:00
Module 14: Perform the Activities of Ripening the Artisan Cheese	04:00	08:00	00:00	00:00	12:00
Module 15: Perform Different Tests during Cheese Production	12:00	24:00	00:00	00:00	36:00
<b>FIC/N2029 - Prepare and Pack Artisan Cheese</b>	<b>08:00</b>	<b>16:00</b>	<b>00:00</b>	<b>00:00</b>	<b>24:00</b>
<b>NOS Version No. 1.0</b>					
<b>NSQF Level 4</b>					
Module 16: Pack, Prepare and Handle Artisan Cheese	04:00	08:00	00:00	00:00	12:00
Module 17: Manage Finished goods and Post Production Activities	04:00	08:00	00:00	00:00	12:00
<b>FIC/N9904 – Ensure Food Safety at the Workplace</b>	<b>08:00</b>	<b>08:00</b>	<b>00:00</b>	<b>00:00</b>	<b>16:00</b>
<b>NOS Version No. 1.0</b>					
<b>NSQF Level 5</b>					
Module 18: Basic Food Safety Standards	08:00	08:00	00:00	00:00	16:00
<b>FIC/N9903 – Ensure Workplace Health and Safety</b>	<b>10:00</b>	<b>16:00</b>	<b>00:00</b>	<b>00:00</b>	<b>26:00</b>
<b>NOS Version No. 1.0</b>					
<b>NSQF Level 5</b>					
Module 19: Follow Preventive Measures to avoid Accidents	02:00	04:00	00:00	00:00	06:00

Module 20: Manage Workplace Emergencies	04:00	08:00	00:00	00:00	12:00
Module 21: Manage Infection Control	04:00	04:00	00:00	00:00	08:00
<b>FIC/N9902 – Work Effectively in an Organization</b> <b>NOS Version No. 1.0</b> <b>NSQF Level 3</b>	<b>08:00</b>	<b>08:00</b>	<b>00:00</b>	<b>00:00</b>	<b>16:00</b>
Module 22: Working Effectively in an Organization	08:00	08:00	00:00	00:00	16:00
<b>SGJ/N1702 – Optimize Resource Utilization at the Workplace</b> <b>NOS Version No. 1.0</b> <b>NSQF Level 3</b>	<b>12:00</b>	<b>24:00</b>	<b>00:00</b>	<b>00:00</b>	<b>36:00</b>
Module 23: Material Conservation	04:00	08:00	00:00	00:00	12:00
Module 24: Energy/Electricity Conservation	04:00	08:00	00:00	00:00	12:00
Module 25: Waste Management Recycling	04:00	08:00	00:00	00:00	12:00
<b>Total Duration</b>	<b>172:00</b>	<b>278:00</b>	<b>00:00</b>	<b>00:00</b>	<b>450:00</b>

## Module Details

### Module 1: Introduction to Food Processing Sector and the Job of 'Artisanal Cheese Maker-Entrepreneur'

#### Bridge Module

#### Terminal Outcomes:

- Describe the food processing industry and its sub-sectors in brief
- Discuss the roles and responsibilities of an Artisanal Cheese Maker

<b>Duration:</b> 04:00	<b>Duration:</b> 00:00
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul style="list-style-type: none"> <li>• Discuss about the food processing industry and dairy sub-sector in brief</li> <li>• Discuss the career opportunities available to an artisanal cheese maker in the food processing industry</li> <li>• Explain the terminologies used in the process of artisanal cheese making</li> <li>• List the sequence of operations to be performed in the job</li> <li>• List the various types of cheese that are produced in the market</li> <li>• Discuss the future of cheese industry in India</li> </ul>	
<b>Classroom Aids:</b>	
Whiteboard, Marker, Duster, Projector, Laptop, PowerPoint Presentation	
<b>Tools, Equipment, and Other Requirements</b>	
Nil	



## Module 2: Comply with Legislative Guidelines for a Production Facility

### Mapped to FIC/N9905 v 1.0

#### Terminal Outcomes:

- Describe various legislative guidelines for a production facility
- Apply appropriate practices to establish the standard procedure for the setting up production facility

<b>Duration: 16:00</b>	<b>Duration: 06:00</b>
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul style="list-style-type: none"> <li>• Outline the various legislations, regulations, and standards including FSSAI guidelines to be followed to produce artisanal product</li> <li>• State the importance of analysing and investigating the purpose and intent of legislation related to various factors</li> <li>• List the authorities responsible for administering legislation for setting up a food processing facility</li> <li>• Outline the procedure and importance of site inspections, reporting variances, and obtaining legislative approvals</li> <li>• List the material and equipment requirements for setting up a production facility</li> <li>• State the significance of obtaining the accurate information from designated personnel in various recorded forms, like checklists, etc.</li> </ul>	<ul style="list-style-type: none"> <li>• Apply appropriate practices to assess workplace and food safety systems to determine compliance as per production needs</li> <li>• Employ appropriate practices to establish standard procedures to ensure compliance with legal requirements</li> <li>• Apply appropriate practices to identify and report non-compliance with the legislative guidelines to the concerned authority</li> <li>• Show how to update all the relevant document for future reference</li> </ul>
<b>Classroom Aids:</b>	
Training kit (Trainer guide, Presentations), Whiteboard, Marker, Projector, Laptop, Presentation, Participant Handbook, etc.	
<b>Tools, Equipment, and Other Requirements</b>	
Sample legislative guidelines, Various materials and equipment, etc.	

## Module 3: Develop Recipes for Artisanal Production

### Mapped to FIC/N9905 v 1.0

#### Terminal Outcomes:

- Describe the procedure to develop new recipes for artisanal production
- Demonstrate how to calculate the estimated cost, final product cost and fix the unit price of the product

<b>Duration:</b> 08:00	<b>Duration:</b> 16:00
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul style="list-style-type: none"> <li>• List various ingredients used in different recipes of artisanal production</li> <li>• Describe various ways to upgrade the existing recipes and developing new ones</li> <li>• Outline the importance of conceptualizing new ideas and experimenting with various combinations of old and new ingredients to develop new products</li> <li>• Discuss various types of cost optimization techniques that can be used in the job</li> </ul>	<ul style="list-style-type: none"> <li>• Employ appropriate practices to formulate recipes and methodologies in accordance with customer needs and product types</li> <li>• Apply appropriate practices to experiment with new and existing methods of production to develop new production methods for a variety of products</li> <li>• Employ appropriate practices to evaluate the quality of production methods to validate and standardize the best product formulation method</li> <li>• Apply appropriate practices to estimate the costs to be incurred for producing the required product as per equipment capacity, material usage, processing, transport, distribution, etc.</li> <li>• Demonstrate how to calculate the cost of the final product and fix the unit price of the product as per standard</li> </ul>
<b>Classroom Aids:</b>	
Training kit (Trainer guide, Presentations), Whiteboard, Marker, Projector, Laptop, Presentation, Participant Handbook	
<b>Tools, Equipment, and Other Requirements</b>	
Sample artisanal recipes, Sample standard operating procedure	

## Module 4: Selection of Vendors for Obtaining Materials

### Mapped to FIC/N9905 v 1.0

#### Terminal Outcomes:

- Describe the procedure to select the vendor for obtaining required materials and equipment
- Apply appropriate practices to maintain material records, equipment manuals, manufacturer's instruction, etc.

<b>Duration:</b> 02:00	<b>Duration:</b> 02:00
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul style="list-style-type: none"> <li>• State the importance of identifying the equipment and materials to be procured before setting up a production facility</li> <li>• Discuss the procedure to inspect the quality of the procured material and equipment</li> <li>• Outline the applicability and capacity of various equipment used in artisanal production</li> <li>• Discuss the key considerations in vendor management</li> <li>• Discuss the standard procedure for reporting and documentation pertaining to production facility</li> </ul>	<ul style="list-style-type: none"> <li>• Apply appropriate practices to identify and select vendors for sourcing raw materials, packaging materials, and equipment for production</li> <li>• Employ appropriate inspection methods to check and verify the quality of materials received from the vendors as per standards</li> <li>• Show how to maintain various material records and other documents such as equipment manuals, manufacturers' instructions, etc.</li> </ul>
<b>Classroom Aids:</b>	
Training kit (Trainer guide, Presentations), Whiteboard, Marker, Projector, Laptop, Presentation, Participant Handbook	
<b>Tools, Equipment, and Other Requirements</b>	
Sample standard operating procedure, Raw material and equipment, etc.	

## Module 5: Perform Entrepreneurial Activities

### Mapped to FIC/N9905 v 1.0

#### Terminal Outcomes:

- Discuss the requirements for expanding businesses
- Use digital and financial literacy to expand businesses and generate opportunities

Duration: 24:00	Duration: 40:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> <li>• Discuss own strengths and weaknesses and analyse the gaps to ensure continuous improvement.</li> <li>• Discuss the measures to be undertaken to utilise time effectively thereby achieving maximum productivity.</li> <li>• List the characteristics of innovative individuals</li> <li>• List the traits of effective time managers</li> <li>• Discuss tips for stress management</li> <li>• Discuss how to manage an enterprise</li> <li>• Describe how to plan effective strategies for solving problems and improving work culture within the team.</li> <li>• List the various types of digital marketing techniques.</li> <li>• Discuss the types and importance of e-commerce in promoting businesses.</li> <li>• List the various types of online banking services being used widely.</li> <li>• List the elements of a proposal to attract future business opportunities and prospective clients.</li> <li>• Explain how to conduct entrepreneurial programs to identify business opportunities, generate employment and increase clientele.</li> <li>• Understand the make in India campaign</li> </ul>	<ul style="list-style-type: none"> <li>• Show how to analyse a situation to identify gaps for improving the work process.</li> <li>• Demonstrate the procedure to plan the time taken to perform various tasks effectively.</li> <li>• Describe how market research is carried out</li> <li>• Role play the characteristics of an effective entrepreneur and leader</li> <li>• Demonstrate the procedure to apply for bank finances</li> <li>• Demonstrate on how to identify new business opportunities</li> <li>• Prepare a business plan and Detailed Project report (DPR)</li> <li>• Prepare a sample plan to solve problems and improve productivity at the workplace.</li> <li>• Demonstrate the procedure to operate a computer for digital marketing, e-commerce, branding, etc.</li> <li>• Show how to use services such as NEFT, IMPS, UPI, RTGS for online banking.</li> <li>• Prepare a detailed sample report consisting of information such as future investments, forecasting, business expansion, etc.</li> <li>• Demonstrate the procedure to conduct an entrepreneurial program for exploring business opportunities and increasing the clientele.</li> <li>• Demonstrate how you will sell a product or service on an e-commerce platform with integration of payment gateway</li> <li>• Demonstrate a case study of a successful entrepreneur.</li> </ul>

**Classroom Aids:**

Training kit (Trainer guide, Presentations), Whiteboard, Marker, Projector, Laptop, Presentation, Participant Handbook

**Tools, Equipment, and Other Requirements**

Sample standard operating procedure.

## Module 6: Recognise and Identify Product Types

*Mapped to FIC/N2027 v 1.0*

### Terminal Outcomes:

- Demonstrate the tasks to identify the raw materials and equipment required for different types of cheese production
- List the basic raw materials required for producing artisanal cheese

<b>Duration: 08:00</b>	<b>Duration: 12:00</b>
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul style="list-style-type: none"> <li>• Discuss various cheese types, their components and general nutritional properties</li> <li>• Discuss about the basic equipment used in cheese production</li> <li>• Explain various types of milks used to make cheese, their properties, and characteristics and also their components that is important in cheese making</li> <li>• State the effect of animal species, animal diet and seasonality can have on cheese</li> <li>• Explain various factors that affect cheese affinage</li> </ul>	<ul style="list-style-type: none"> <li>• Show how to identify various cheese types, their characteristics and ageing factors</li> <li>• Employ appropriate practices to identify different processes of cheese production</li> <li>• Show how to select the types of starter cultures and enzymes to be added depending on cheese type</li> <li>• Apply appropriate practices to use suitable type of milk for different cheese production</li> <li>• Employ proper practices to identify and use basic artisanal cheese making equipment</li> </ul>
<b>Classroom Aids:</b>	
Training kit (Trainer guide, Presentations), White board, Marker, Projector, Laptop, Presentation, Participant Handbook and Related Standard Operating Procedures	
<b>Tools, Equipment and Other Requirements</b>	
Different types of Cheese, Required equipment, Different enzymes and cultures, etc.	

## Module 7: Plan for Cheese Production Activities

*Mapped to FIC/N2027 v 1.0*

### Terminal Outcomes:

- Perform the activities to plan the required workforce and material for the cheese production process
- Describe the materials required for planning for cheese production

<b>Duration: 08:00</b>	<b>Duration: 18:00</b>
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul style="list-style-type: none"> <li>• Describe the components of a production plan</li> <li>• Discuss the purpose, basic principles and processes of artisan cheese making</li> <li>• Explain the processing steps in different types of cheese making</li> <li>• Elaborate the processing steps required in cheese making process</li> <li>• Discuss the procedure and factors to plan for the material, manpower, batch size and machine utilisation for cheese production</li> <li>• Explain various organoleptic properties of cheese and their relationship to processes and ingredients in cheese making</li> </ul>	<ul style="list-style-type: none"> <li>• Apply standard practices for organising and allocating the work tasks to be completed for cheese production</li> <li>• Create a sample production plan for cheese production consisting of quality and quantity of raw materials, types of cheese, estimated timeline etc.</li> <li>• Apply proper methods to plan the production process as per process flow chart, formulation chart etc.</li> <li>• Apply appropriate practices to identify the type of raw material, equipment and packaging material based on the cheese to be produced and packed</li> <li>• Employ appropriate methods to calculate the quantity of different material (raw material, packaging material, etc.), equipment utilization and man hours required for production process</li> </ul>
<b>Classroom Aids:</b>	
Training kit (Trainer guide, Presentations), White board, Marker, Projector, Laptop, Presentation, Participant Handbook and Related Standard Operating Procedures	
<b>Tools, Equipment and Other Requirements</b>	
Sample flow chart, formulation charts, Sample raw materials used, Packaging materials, vat, brine bath, strainer etc.	

## Module 8: Maintain Work Area and Production Tools

### Mapped to FIC/N2027 v 1.0

#### Terminal Outcomes:

- Perform the tasks to inspect the production tools, equipment and machinery for cleanliness and maintenance
- Describe the procedure to clean and sanitize the work area

Duration: 08:00	Duration: 12:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> <li>• Discuss the Food Safety and Standards Authority of India (FSSAI) guidelines for selection of ingredients, storing the materials received, types of cheese to be produced, upkeep of tools and equipment, documentation, etc.</li> <li>• Elaborate the food safety and quality assurance standards and procedures as well as the food safety risks associated with the process and related control measures</li> <li>• Describe the work health and safety hazards and standard procedure for safe disposal of hazardous material</li> <li>• Discuss the operating and routine maintenance procedures of the equipment and tools used for artisan cheese making</li> <li>• Explain the standard procedures, application methods, equipment requirements of common cleaners and sanitizers and the best practices and management of equipment and facilities regarding hygiene, cleaning and sanitation during cheese production</li> <li>• Explain various environmental issues and control measures relevant to the process, including waste collection and handling procedures related to the process</li> <li>• Discuss the manufacturing processes, including materials and equipment,</li> </ul>	<ul style="list-style-type: none"> <li>• Apply appropriate practices to identify workplace health and safety hazards and assess and implement the control measures for health and safety issues</li> <li>• Dramatize a situation on how to report and document the safety and non-compliance issues as per the company standards</li> <li>• Apply appropriate inspection methods to check the work area thoroughly to ensure the area is free from waste and hazardous materials</li> <li>• Employ appropriate methods to assess and select cleaning and sanitation methods, materials and regimes for their effectiveness and environmental impact.</li> <li>• Employ appropriate methods to establish inspection or test methods to confirm effectiveness of cleaning and sanitation program</li> <li>• Roleplay on how to communicate responsibilities for cleaning and sanitation</li> <li>• Demonstrate how to clean and sanitize the work area as well as the production tools, equipment and machinery using appropriate cleaning agents and sanitizers and dispose of the waste materials from the work area as per the standards</li> <li>• Apply appropriate inspection methods to check the production tools, equipment and machinery for proper functioning</li> <li>• Employ proper practices to assemble the materials to be used as per standards</li> </ul>



<p>involved in preparing delivered milk for further processing</p> <ul style="list-style-type: none"> <li>Describe the procedure of milk handling and its impact on properties for further processing</li> </ul>	
<b>Classroom Aids:</b>	
Training kit (Trainer guide, Presentations), White board, Marker, Projector, Laptop, Presentation, Participant Handbook and Related Standard Operating Procedures	
<b>Tools, Equipment and Other Requirements</b>	
Sample flow chart, formulation charts, Sample reports on raw materials used, packaging materials, quality testing reports, Goods Receipt Note (GRN), sanitizers, cleaning agents, etc.	

## Module 9: Establish Materials Flow Protocol

### Mapped to FIC/N2027 v 1.0

#### Terminal Outcomes:

- Perform the tasks to receive, handle and store ingredients safely for cheese production
- Demonstrate the implementation procedure to identify defects and abnormalities in delivered milk

Duration: 08:00	Duration: 12:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> <li>• Elaborate the standard procedures to receive, handle and store ingredients safely for cheese production, and maintain their functionality</li> <li>• Discuss the data requirements appropriate for food safety, quality and production standards</li> <li>• Discuss various types and impact of inhibitory substances in milk</li> <li>• Explain the contamination risk of inoculants and contaminants</li> <li>• Discuss the procedure to test ingredients and materials for appropriate characteristics and specifications as well as the testing and processing stages in preparing milk for further processing</li> <li>• Describe the hazards associated with raw milk and risks associated to milk product quality from incorrect preparation and handling of fresh milk</li> <li>• Discuss the compositional requirements of prepared milk for further processing and the output of each of the processes used in the preparation of milk for further processing</li> <li>• Describe the operation procedure of equipment and accessories to be used in the preparation of milk for further processing</li> <li>• Discuss the critical factors in the testing and preparation of received milk for further processing into dairy products</li> </ul>	<ul style="list-style-type: none"> <li>• Apply appropriate practice to provide safe working environment for material receipt, testing, storage and processing</li> <li>• Apply standard procedures to receive fresh milk and other materials from various vendors and establish receipt and testing procedures for milk and other materials</li> <li>• Show how to inspect and test the materials received for quality parameters to confirm desired quality and quantity for production</li> <li>• Demonstrate how to blend and store milk and other material as per standards</li> <li>• Dramatize a situation on how to implement a system to identify defects and abnormalities in delivered milk</li> <li>• Role play on how to report substandard quality ingredients to the relevant personnel</li> <li>• Apply appropriate practices to organize the ingredients as per production plan</li> <li>• Prepare sample records of materials received, materials consumed, quality testing reports, Goods Receipt Note (GRN), etc.</li> </ul>

<ul style="list-style-type: none"> <li>• Explain the processes used in the preparation and manufacture of non-fermented dairy products</li> <li>• Discuss the potential product defects and their causes, which may arise in the preparation of milk for further processing</li> <li>• Describe milk sampling requirements for cheese making and procedure of sampling and testing</li> </ul>	
<b>Classroom Aids:</b>	
Training kit (Trainer guide, Presentations), White board, Marker, Projector, Laptop, Presentation, Participant Handbook and Related Standard Operating Procedures	
<b>Tools, Equipment and Other Requirements</b>	
Required raw material, Fresh milk, Sample reports on raw materials used, packaging materials, quality testing reports, Goods Receipt Note (GRN), etc.	

## Module 10: Prepare Milk and Produce Lactic Acid Coagulated Cheese

### Mapped to FIC/N2028 v 1.0

#### Terminal Outcomes:

- Perform the activities of pasteurization and acidification for cheese production
- Explain the entire procedure of producing Lactic Acid coagulated cheese

<b>Duration: 08:00</b>	<b>Duration: 16:00</b>
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul style="list-style-type: none"> <li>• Discuss various types of cheese such as cream cheese, queso fresco, cheddar, swiss cheese, etc.</li> <li>• Discuss the process of acidification of milk, addition of starter culture and coagulating enzymes</li> <li>• Explain the standard practice followed for testing, pasteurizing and cooling the milk for cheese production</li> <li>• State the importance of performing the pasteurization process and adequately cooling down the pasteurized milk</li> <li>• Discuss the raw materials, tools and equipment required for producing lactic acid coagulated cheese</li> <li>• Describe the desirable quality parameters of raw materials, additives, ingredients and preservatives producing lactic acid coagulated cheese</li> <li>• Discuss various types of cultures and enzymes to be used and recipe formulation for different cheese types</li> <li>• Explain the impact of size of cut curd on moisture loss</li> <li>• Discuss the ranges of acidity profile for different cheeses</li> </ul>	<ul style="list-style-type: none"> <li>• Apply appropriate procedures to review production processes for preparing milk for further processing</li> <li>• Demonstrate how to pasteurize the received milk and cool down the pasteurized milk adequately</li> <li>• Apply appropriate practices to standardize the milk as per the desired requirement for making cheese</li> <li>• Show how to transfer pasteurized milk into cheese safely and maintaining hygienic practice</li> <li>• Demonstrate how to add starter culture and coagulating enzymes to the milk for different cheese production</li> <li>• Apply appropriate practices to maintain temperature throughout the vat or tank according to cheese variety and manage curd ladling, breaking or cutting to meet production goals</li> <li>• Draft a curd processing schedule to meet production goals</li> <li>• Show how to monitor the moisture in cheese by regulating syneresis</li> <li>• Demonstrate how to adjust calcium phosphate levels and drain curd to ensure required PH level and consistency is maintained according to production goals</li> </ul>
<b>Classroom Aids:</b>	
Training kit (Trainer guide, Presentations), White board, Marker, Projector, Laptop, Presentation, Participant Handbook and Related Standard Operating Procedures	
<b>Tools, Equipment and Other Requirements</b>	
Different types of cheese, Required raw material, Required tools and equipment, etc.	



## Module 11: Produce Rennet Based Coagulated Cheese

*Mapped to FIC/N2028 v 1.0*

### Terminal Outcomes:

- Perform the activities of producing rennet based coagulated cheese
- Describe the entire procedure of producing Lactic Acid coagulated cheese

Duration: 06:00	Duration: 16:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> <li>• Discuss the raw materials, tools and equipment required for producing Rennet Based Coagulated Cheese</li> <li>• Describe the desirable quality parameters of raw materials, additives, ingredients and preservatives for Rennet Based Coagulated Cheese</li> <li>• Discuss various types of cultures and enzymes to be use for producing Rennet Based Coagulated Cheese</li> <li>• Elaborate the recipe formulation for Rennet Based Coagulated Cheese</li> <li>• State the importance of continuous stirring the preliminary mixtures (such as during curd formation) and monitoring in cheese production</li> <li>• Explain the procedure and techniques used to produce moulded cheese</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate how to add starter culture and mould spores to the pre heated milk for producing Rennet Based Coagulated Cheese</li> <li>• Show how to use adjunct culture and acid to influence the texture, flavour and calcium phosphate level of the ripened cheese for producing Rennet Based Coagulated Cheese</li> <li>• Demonstrate how to add cultures and rennet to milk and hold at temperature for producing Rennet Based Coagulated Cheese</li> <li>• Prepare a sample pH and temperature log to monitor yield</li> <li>• Show how to calculate total time, flocculation and hardening times for optimum acidification curve, coagulation and moisture content, according to desired cheese type and parameters</li> <li>• Apply appropriate practices to monitor curd hardening, temperature and cutting to achieve optimal yield and the required acidification curve and moisture level for the cheese</li> <li>• Demonstrate how to remove part of the whey and replace with water to wash lactose and lactic acid from the curd and drain out the vat</li> <li>• Employ appropriate practices to mat the curd under the whey to achieve required outcome</li> <li>• Demonstrate how to prepare moulds, and prepare curd for milling/stretching/hooping into prepared moulds</li> <li>• Show how to apply adequate pressure</li> </ul>

	<p>to ensure appropriate filling of cheese into the mould for required cheese variety</p> <ul style="list-style-type: none"> <li>• Apply appropriate practices to turn cheeses in moulds at appropriate intervals to maximize optimal drainage and acidification and press cheese and remove from moulds where appropriate for cheese variety</li> </ul>
<b>Classroom Aids:</b>	
Training kit (Trainer guide, Presentations), White board, Marker, Projector, Laptop, Presentation, Participant Handbook and Related Standard Operating Procedures	
<b>Tools, Equipment and Other Requirements</b>	
Rennet, vat and other raw materials	

## Module 12: Produce Acid and Heat Coagulated Cheese

### Mapped to FIC/N2028 v 1.0

#### Terminal Outcomes:

- Perform the activities of producing acid and heat coagulated cheese
- Describe the process of preparing acid and heat coagulated cheese

Duration: 06:00	Duration: 16:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> <li>• Discuss the raw materials, tools and equipment required for producing Acid and Heat Coagulated Cheese</li> <li>• Describe the desirable quality parameters of raw materials, additives, ingredients and preservatives for Acid and Heat Coagulated Cheese</li> <li>• Discuss various types of cultures and enzymes to be use for producing Acid and Heat Coagulated Cheese</li> <li>• Elaborate the recipe formulation for Acid and Heat Coagulated Cheese</li> <li>• State the importance of controlling the cheese flavour through choice of ingredients, such as whey, milk, cream, acidulant and salt according to cheese type</li> <li>• Discuss the significance of ensuring minimizing the adverse salt profile effects in the finished product</li> </ul>	<ul style="list-style-type: none"> <li>• Show how to acidify the pre heated milk by adding starter culture to coagulate the whey protein according to cheese variety</li> <li>• Apply appropriate procedure to hold the curd in the curd and whey mixture after coagulation</li> <li>• Show how to control cheese flavour depending on cheese type</li> <li>• Demonstrate how to drain whey from the curd and apply salting treatments for required outcome</li> <li>• Employ appropriate practices to cool and dry cheeses before packing</li> </ul>
<b>Classroom Aids:</b>	
Training kit (Trainer guide, Presentations), White board, Marker, Projector, Laptop, Presentation, Participant Handbook and Related Standard Operating Procedures	
<b>Tools, Equipment and Other Requirements</b>	
Whey curd, Dry cheese, Required tools and equipment.	



## Module 13: Perform Monitoring Activities during Cheese Production

### Mapped to FIC/N2028 v 1.0

#### Terminal Outcomes:

- Perform the tasks to monitor the parameters required for cheese production
- Describe the activities to be monitored during cheese production

<b>Duration: 04:00</b>	<b>Duration: 08:00</b>
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul style="list-style-type: none"> <li>• Discuss the temperature required for acidifying of milk and the parameters required for curd formation and procedure to control these</li> <li>• State the importance of optimization the yield of curd by refining process control parameters</li> <li>• Describe basic molecular structures of carbohydrates, proteins and fats and the process to analyze whey content for fat and other solids and its importance</li> <li>• State the importance of adding salt and maintaining temperature of brine solution in the process</li> <li>• State the significance of recording the relevant information in the logbook after each trial</li> </ul>	<ul style="list-style-type: none"> <li>• Apply appropriate practices to monitor the temperature of acidified milk and parameters for the curd formation during cheese making</li> <li>• Show how to stir the curd according to cheese type and production goals</li> <li>• Dramatize on how to analyze whey content for fat and other solids to gauge efficiency of acidification, curd, cutting and yield potential</li> <li>• Employ appropriate practices to optimize yield of curd by refining process control parameters</li> <li>• Dramatize a situation on how to monitor and control different parameters in cheese making process appropriately</li> <li>• Demonstrate how to transfer cheese into a brine bath to add desired amount of salt depending on the cheese to be produced</li> <li>• Apply appropriate practices to maintain the temperature of brine solution to ensure uniformity in the flavour of cheese produced</li> <li>• Prepare a sample log for pH, titratable acidity, temperature etc.</li> </ul>
<b>Classroom Aids:</b>	
Training kit (Trainer guide, Presentations), White board, Marker, Projector, Laptop, Presentation, Participant Handbook and Related Standard Operating Procedures	
<b>Tools, Equipment and Other Requirements</b>	
Raw material, brine bath, Ph meter, etc.	

## Module 14: Perform the Activities of Ripening the Artisan Cheese

### Mapped to FIC/N2028 v 1.0

#### Terminal Outcomes:

- Perform the activities to maintain and control the conditions for ripening of artisanal cheese
- Perform the quality tests of produced cheese

<b>Duration: 04:00</b>	<b>Duration: 08:00</b>
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul style="list-style-type: none"> <li>• Discuss the procedure to store the cheese for ageing as per cheese type</li> <li>• Describe the ripening conditions for various cheese</li> <li>• Discuss the key composition ratios of acid-coagulated soft cheeses and the importance to optimize curing and ripening agents</li> <li>• State the importance of turning and rotating cheese for even ripening</li> <li>• Explain the procedure to conduct quality tests, such as pH, salt, texture, fat, moisture, water activity, colour, etc. required for produced cheese</li> <li>• Explain the process recording procedure and ways to take corrective action for the defects in produced cheeses</li> <li>• List the information required to be recorded in the entire work process</li> </ul>	<ul style="list-style-type: none"> <li>• Apply appropriate practices to store the cheese for ageing as per the cheese type</li> <li>• Employ appropriate practices to control and monitor the ripening conditions and stored cheese periodically</li> <li>• Show how to optimize curing and ripening agents by planning for and adjusting the key composition ratios of acid-coagulated</li> <li>• Demonstrate how to use surface treatments according to cheese type and recipe</li> <li>• Show how to turn and rotate cheese to ensure ripening is even</li> <li>• Show how to extract sample from the lot and perform quality tests during and post production</li> <li>• Demonstrate how to record necessary information as required in the work process</li> <li>• Show how to take necessary actions for defects in cheese at the maturation process and adjust to correct it</li> </ul>
<b>Classroom Aids:</b>	
Training kit (Trainer guide, Presentations), White board, Marker, Projector, Laptop, Presentation, Participant Handbook and Related Standard Operating Procedures	
<b>Tools, Equipment and Other Requirements</b>	
Raw material, Tools and equipment, etc.	

## Module 15: Perform Different Tests during Cheese Production

*Mapped to FIC/N2028 v 1.0*

### Terminal Outcomes:

- Perform the various tests of during cheese production
- List the tests performed during cheese production

<b>Duration: 12:00</b>	<b>Duration: 24:00</b>
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul style="list-style-type: none"> <li>• Explain the procedure to prepare samples for testing according to workplace procedures</li> <li>• Discuss various tests conducted to inspect the quality of cheese and procedure followed</li> <li>• Describe the procedure of microbial testing for and interpretation of results for salmonella, staphylococcus, listeria and E. coli</li> <li>• Explain the basic molecular structures of carbohydrates, proteins and fats</li> <li>• Discuss the procedure to interpret test results for information on composition, properties and reactions and implement changes to cheese making process based on test results</li> </ul>	<ul style="list-style-type: none"> <li>• Apply appropriate practices to determine sampling points and sampling size for physical, chemical and microbial properties</li> <li>• Show how to prepare samples for testing according to workplace procedures</li> <li>• Employ proper practices to select and sterilize sampling equipment</li> <li>• Dramatize on how to establish and review safe work procedures for processes requiring handling of chemicals and microbes, and involving chemical and microbial reactions in cheese making</li> <li>• Apply appropriate practices to observe and record data for yeasts and moulds</li> <li>• Demonstrate how to carry out sampling and testing for inhibitory substances in milk</li> <li>• Demonstrate how to evaluate organoleptic properties of final cheese product using sensory testing</li> <li>• Employ appropriate practices to interpret test results for information on composition, properties and reactions</li> <li>• Show how to implement changes to cheese making process based on test results</li> </ul>
<b>Classroom Aids:</b>	
Training kit (Trainer guide, Presentations), White board, Marker, Projector, Laptop, Presentation, Participant Handbook and Related Standard Operating Procedures	
<b>Tools, Equipment and Other Requirements</b>	
Raw material, Tools and equipment, etc.	

## Module 16: Pack, Prepare and Handle Artisanal Cheese

*Mapped to FIC/N2029 v 1.0*

### Terminal Outcomes:

- Describe the packaging, wrapping and storing procedure for different types of artisanal cheese
- Demonstrate the method to pack, prepare and handle artisanal cheese

Duration: 04:00	Duration: 08:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> <li>• List different types of cheese to be presented</li> <li>• Elaborate various steps to be performed for packing the produced cheese</li> <li>• Discuss the standard guidelines as per FSSAI for production, packaging, wrapping labelling, storing, handling raw materials and produced cheese varieties</li> <li>• Explain the ways of safe waste disposal from the work area</li> <li>• State the importance of bringing cheeses to room temperature before serving</li> <li>• Discuss the temperature for storing cheese</li> <li>• Explain the procedure to conduct cheese tasting and present the same</li> </ul>	<ul style="list-style-type: none"> <li>• Apply appropriate practices to ensure the parameters of the packaging material are met as per the specifications</li> <li>• Show how to place cheese inside the packaging material for manual packaging</li> <li>• Apply appropriate method to monitor the process to ascertain suitable packaging for cheese production</li> <li>• Show how to record information either annually or on ERP regarding the finished products</li> <li>• Demonstrate how to dispose waste and unwanted materials as per standards</li> <li>• Apply appropriate practices to identify different types/ varieties of cheese and their characteristics</li> <li>• Show how to cut different types of cheeses to specified weight using correct utensils for customer testing and designing</li> <li>• Apply appropriate practices to design a display for display cabinet and cheese tasting with an identified theme</li> <li>• Show how to present cheese for customer tasting with specified theme, characteristics, provenance and processing techniques of each</li> <li>• Demonstrate how to wrap and store cheeses as per cheese types and environmental condition</li> <li>• Apply appropriate practices to make recommendations for post-purchase</li> </ul>

	storage
<b>Classroom Aids:</b>	
Training kit (Trainer guide, Presentations), White board, Marker, Projector, Laptop, Presentation, Participant Handbook and Related Standard Operating Procedures	
<b>Tools, Equipment and Other Requirements</b>	
Packaging material, Packaging machine, etc.	

## Module 17: Manage Finished goods and Post Production Activities

### Mapped to FIC/N2029 v 1.0

#### Terminal Outcomes:

- Perform the tasks to inspect the produced cheese for quality
- Describe the procedure to co-ordinate with the vendors for distribution and supply of cheese
- Perform post production cleaning of the work area and used tools and equipment

Duration: 04:00	Duration: 08:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> <li>• Explain the inspection methods to check the finished product for the quality before dispatch</li> <li>• Discuss the methods for maintaining cheese quality from packaging through to retail sale</li> <li>• State the significance of vendor coordination and details to be shared for supply of finished cheese products</li> <li>• State the importance of keeping the work area clean and tidy</li> <li>• Discuss the measures to be taken against pest infestations and presence of dust, water, etc.</li> <li>• Explain the cleaning procedure of the work area, machineries, equipment and tools using appropriate cleaning agents and sanitizers</li> </ul>	<ul style="list-style-type: none"> <li>• Apply appropriate inspection method to check the quality of finished products thoroughly before dispatch</li> <li>• Apply appropriate procedure to identify optimal ripening stage and ongoing care requirements for the cheese and communicate these to cheese buyers and sellers</li> <li>• Role play on how to coordinate with vendors for distribution and supply of cheese</li> <li>• Create sample reports regarding quality and quantity of goods supplied, vendor details, customer details, material receipts, time of shipment, etc</li> <li>• Apply appropriate practices to monitor stocked material (raw material, processed material and finished goods) for desired quality and quantity as per the purchase order</li> <li>• Employ appropriate practices to ensure a clean and tidy workplace and take relevant measures against pest infestations and presence of dust, water, etc.</li> <li>• Demonstrate how to clean the work area, machineries, equipment and tools using appropriate cleaning agents and sanitizers</li> <li>• Show how to repair the faults in the equipment or machines to be used for cheese production</li> <li>• Apply appropriate techniques to manage, control, and dispose of the</li> </ul>

	packaging wastage as per standard
<b>Classroom Aids:</b>	
Training kit (Trainer guide, Presentations), White board, Marker, Projector, Laptop, Presentation, Participant Handbook and Related Standard Operating Procedures	
<b>Tools, Equipment and Other Requirements</b>	
Packaging material, Packaging machine, cleaning agents, etc.	

## Module 18: Basic Food Safety Standards

### Mapped to FIC/N9904 v 1.0

#### Terminal Outcomes:

- Explain the various food safety standards to be followed during the production process
- Prepare sample reports regarding food safety regulations, inspections, faults observation, etc.

<b>Duration: 08:00</b>	<b>Duration: 08:00</b>
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul style="list-style-type: none"> <li>• List the types of biological, chemical and physical hazards present in the food processing industry</li> <li>• Discuss various types of food contaminations, their causes, and ways to prevent them</li> <li>• Discuss the importance of following the standard procedures for ensuring food safety)</li> <li>• State the importance of ensuring that the materials (such as raw materials, processed materials, finished goods, etc.) are adequately isolated to prevent them from contamination</li> <li>• Outline the standard regulations to be followed for ensuring food safety as listed in 'The Food Safety and Standards Act, 2006 that need to be followed during fruit wine production</li> <li>• Discuss the role of HACCP, VACCP and TACCP as well as procedures to implement these in the food industry</li> <li>• Discuss about product information and consumer awareness, product recall and withdrawal, and traceability</li> <li>• Explain the procedure to conduct workplace food safety audits</li> <li>• Discuss various types of allergens and their management at the workplace</li> <li>• Discuss the corrective measures to be applied to ensure food safety</li> <li>• List various issues that can arise during food production and other processes</li> </ul>	<ul style="list-style-type: none"> <li>• Apply appropriate practices to identify various biological, chemical, and physical hazards at various stages (procurement of raw material; production, manufacturing, distribution, delivery of finished product, etc.) of food processing</li> <li>• Employ appropriate practices to implement food safety procedures and regulatory policies at the workplace</li> <li>• Employ appropriate practices to establish and follow Good Manufacturing Practices (GMPs) related to ergonomics, cleaning and sanitation, equipment and containers, pest control, facilities, food storage, transportation, distribution etc.</li> <li>• Demonstrate the procedure followed for allergen management and handling and storage of raw materials</li> <li>• Apply appropriate practices to establish and follow monitoring systems, like Hazard Analysis Critical Control Point (HACCP)</li> <li>• Apply relevant practices to take appropriate action in instances such as VACCP (Vulnerability Assessment Critical Control Points) and TACCP (Threat Assessment Critical Control Points)</li> <li>• Apply appropriate practices to plan and execute an audit on food safety address the non-conformance with root cause analysis (RCA), and take</li> </ul>



<ul style="list-style-type: none"> <li>• Discuss the procedure of performing root cause analysis and taking corrective and preventive actions against workplace problems</li> <li>• State the significance of training the team members regarding various food safety procedures such as GMP, HACCP, etc.</li> <li>• List the information to be recorded in the work process</li> </ul>	<p>corrective action preventive action (CAPA)</p> <ul style="list-style-type: none"> <li>• Role play a situation on how to address issues pertaining to food safety and quality reported by the team members</li> <li>• Prepare sample reports for food safety regulations followed, inspections done, faults observed, etc.</li> <li>• Dramatize a situation on how to organize training and workshops on food safety aspects such as Good Manufacturing Practices (GMP), HACCP, VACCP, TACCP, etc.</li> </ul>
<b>Classroom Aids:</b>	
Training kit (Trainer guide, Presentations), White board, Marker, Projector, Laptop, Presentation, Participant Handbook and Related Standard Operating Procedures	
<b>Tools, Equipment and Other Requirements</b>	
Sample pictures of various biological, chemical, and physical hazards, Sample pictures of Contaminants, samples of potential allergens, process flow chart and HACCP plan.	

## Module 19: Follow Preventive Measures to avoid Accidents

### Mapped to FIC/N9903 v 1.0

#### Terminal Outcomes:

- Explain the standard procedure to be followed for dealing with workplace hazards safely
- Describe how to minimize potential risks and accidents at the workplace
- Demonstrate how to train the workforce on accident prevention techniques effectively

Duration: 02:00	Duration: 04:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> <li>• Define 'hazards' and 'risks'</li> <li>• Discuss the causes of various types of workplace hazards, risks and accidents, preventive measures to be taken as well as the procedures to deal with the same</li> <li>• State the importance of maintaining the equipment effectively</li> <li>• Discuss the standard practices to be followed to control and prevent risks, hazards, and accidents</li> <li>• Discuss the various types of safety signs and their relevance at the workplace</li> <li>• State the significance of displaying the common hazard signages wherever required</li> <li>• Outline the importance and always ensuring the availability of general health and safety equipment</li> <li>• Describe the causes of fire, ways to prevent them and rescue techniques to be followed at times of fire at the workplace</li> <li>• Outline the purpose and usage of various Personal Protective Equipment (PPE) required at the workplace</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate how to use and dispose of relevant personal protective equipment as per tasks and work conditions</li> <li>• Show how to implement organisational safety protocols to prevent accidents and hazards at the workplace</li> <li>• Demonstrate how to use various types of fire extinguishers effectively Dramatize a situation on how to train the workforce on accident prevention techniques (such as role of appropriate PPE; use of fire extinguishers, dealing with hazards; identification of risks that could lead to accidents; safety protocols followed to avoid accidents; role of different types of hazard signs, safe lifting and carrying practices, etc. required at the workplace)</li> </ul>
<b>Classroom Aids:</b>	
Training kit (Trainer guide, Presentations), White board, Marker, Projector, Laptop, Presentation, Participant Handbook and Related Standard Operating Procedures	
<b>Tools, Equipment and Other Requirements</b>	
Personal Protection Equipment: Safety glasses, Head protection, Rubber gloves, Safety footwear, Warning signs and tapes, Fire extinguisher, First aid kit, Relevant Standard Operating Procedures and Sample reports	

## Module 20: Manage Workplace Emergencies

### Mapped to FIC/N9903 v 1.0

#### Terminal Outcomes:

- Apply appropriate practices to deal with the emergencies at workplace effectively
- Describe the trainings to be provided for dealing with emergencies at the workplace

<b>Duration: 04:00</b>	<b>Duration: 08:00</b>
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul style="list-style-type: none"> <li>• Discuss workplace emergency and evacuation procedures and the importance of following them</li> <li>• Explain the procedure to be followed for administering immediate first aid to victims in case of cuts, bleeding, burns, choking, electric shock, poisoning, etc.</li> <li>• Discuss the procedure to be followed for providing artificial respiration and cardio-pulmonary resuscitation (CPR) to the affected person and highlight its significance</li> <li>• State the impact of health, safety and security breaches on self, team, and work process</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate the procedure to be followed to free a person from electrocution safely</li> <li>• Show how to administer appropriate first aid procedure to victims in case of cuts, bleeding, burns, choking, electric shock, poisoning, etc.</li> <li>• Demonstrate the procedure followed to provide artificial respiration and cardio-pulmonary resuscitation (CPR) in various instances (e.g., cardiac arrest)</li> <li>• Roleplay a situation on how to report information such as identified breaches in health, safety and security policies and procedures to the concerned authority accurately</li> <li>• Dramatize a situation on how to train the workforce on emergency procedures (such as safe evacuation; treating a person from electrocution; immediate first aid to be given at times of cuts, bleeding, burns, choking, electric shock, poisoning, etc.; administering artificial respiration and cardio-pulmonary resuscitation (CPR); escalating issues beyond own scope, etc.) to be followed at the workplace</li> </ul>
<b>Classroom Aids:</b>	
Training kit (Trainer guide, Presentations), White board, Marker, Projector, Laptop, Presentation, Participant Handbook and Related Standard Operating Procedures	
<b>Tools, Equipment and Other Requirements</b>	
Personal Protection Equipment: Safety glasses, Head protection, Rubber gloves, Safety footwear, Warning signs and tapes, Fire extinguisher, First aid kit, Relevant Standard Operating Procedures and Sample reports	

## Module 21: Manage Infection Control

### Mapped to FIC/N9903 v 1.0

#### Terminal Outcomes:

- Describe the various steps to be followed for managing infections at the workplace
- Perform various tasks to train the workforce on infection control practices effectively

Duration: 04:00	Duration: 04:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> <li>• List the general sources of infections</li> <li>• Discuss the procedures to be followed to tackle infection spread and the importance of carrying out the sanitization of the work area, equipment and related facilities as per standards</li> <li>• Explain various ways to store the sanitization materials appropriately</li> <li>• Discuss various types of potential infections along with the precautionary measures to be taken, and safety protocols to be followed at the workplace</li> <li>• Discuss appropriate actions to be taken during illness to self and others at the workplace</li> <li>• Describe the parameters to be assessed during health and safety audits, their acceptability levels of appropriateness and the procedure to conducting these audits</li> <li>• Discuss various parameters to be assessed and compliance issues to be addressed during the review of SOPs and the ways to improve them as per required quality and safety standards</li> <li>• State the importance of undergoing preventive health check-ups organized by the organisation in compliance with FSSAI guidelines</li> <li>• List various types of documents and records to be maintained in the work process</li> </ul>	<ul style="list-style-type: none"> <li>• Employ appropriate practices to follow and enforce Good Hygiene Practices (GHP) among the team members</li> <li>• Employ appropriate practices to store sanitisation materials effectively</li> <li>• Dramatize a situation to address team issues related to workplace health and safety Roleplay on how to train the workforce on infection control practices to be followed at the workplace</li> </ul>
<b>Classroom Aids:</b>	

Training kit (Trainer guide, Presentations), White board, Marker, Projector, Laptop, Presentation, Participant Handbook and Related Standard Operating Procedures

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

Relevant Standard Operating Procedures and Sample reports

## Module 22: Working Effectively in an Organization

### Mapped to FIC/N9902 v 1.0

#### Terminal Outcomes:

- State the importance of proper communication and teamwork at the workplace
- Roleplay a situation to communicate with others effectively

Duration: 08:00	Duration: 08:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> <li>• Discuss the applicable organisational quality procedures and processes for working effectively in a team</li> <li>• Elucidate the legislations, standards, policies, and procedures followed in the organization relevant to employment, behaviour, harassment, discrimination, and performance conditions</li> <li>• State the importance of well-defined reporting structure in an organisation. List the various types of inter-dependent functions applicable in the job</li> <li>• Discuss the different types of harassment and discrimination based on gender, disability, caste, religion, and culture</li> <li>• List the key factors that aid in prioritising tasks</li> <li>• Discuss the components of effective communication and its importance at the workplace</li> <li>• State the impact of poor communication on the employee, the employer, and the customer</li> <li>• State the importance of teamwork in organizational and individual success.</li> <li>• Discuss the importance of ethics and discipline for professional success</li> <li>• Explain the ways to address grievances appropriately and effectively</li> </ul>	<ul style="list-style-type: none"> <li>• Roleplay a situation on how to obtain information, seek clarifications, reciprocate understanding and provide information accurately and clearly</li> <li>• Roleplay a situation on how to use inclusive language (verbal, non-verbal and written) that is gender, disability and culturally sensitive while interacting with others</li> <li>• Show how to consult and assist others to maximize effectiveness and efficiency at work</li> <li>• Dramatize a situation to show how to escalate problems and grievances beyond own scope to the concerned authority</li> <li>• Roleplay a situation on how to take appropriate action to resolve conflicts at the workplace</li> <li>• Roleplay a situation on how to report incidents of harassment and discrimination to appropriate authority</li> </ul>

<ul style="list-style-type: none"> <li>• Discuss the importance of managing interpersonal conflicts effectively and ways to do so</li> <li>• List the different types of disabilities and the challenges faced by persons with disability (PwD)</li> <li>• Discuss the applicable laws, acts and provisions defined for PwD by the statutory bodies</li> <li>• State the importance of gender sensitivity and equality</li> <li>• Discuss the applicable legislations, grievance redressal mechanisms, and penalties against harassment at the workplace</li> <li>• State the importance of transacting with others without personal bias</li> </ul>	
<b>Classroom Aids:</b>	
Computer, Projection Equipment, PowerPoint Presentation and software, Facilitator's Guide, Participant's Handbook	
<b>Tools, Equipment and Other Requirements</b>	
Nil	

## Module 23: Material Conservation

*Mapped to SGJ/N1702 v 1.0*

### Terminal Outcomes:

- Discuss optimal usage of material including water in various tasks/activities/processes

<b>Duration: 04:00</b>	<b>Duration: 08:00</b>
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul style="list-style-type: none"> <li>• List the types of hazards, risks and threats associated with handling different materials</li> <li>• Discuss the role of workstation layout, electrical and thermal equipment used in the material conservation</li> <li>• Discuss organisational procedures for minimising waste</li> <li>• Elucidate practices of efficient and inefficient management and utilization of material and water at the workplace</li> <li>• Discuss the ways to manage material and water usage at work effectively</li> </ul>	<ul style="list-style-type: none"> <li>• Show how to check for spills and leakages in various materials applicable in the job</li> <li>• Demonstrate how to plug the spills and leakages appropriately</li> <li>• Roleplay a situation on how to escalate any issues related to repair of spills and leakages to the concerned authority effectively</li> <li>• Demonstrate the standard practices to be followed for cleaning tools, machines and equipment effectively</li> </ul>
<b>Classroom Aids:</b>	
Computer, Projection Equipment, PowerPoint Presentation and software, Facilitator's Guide, Participant's Handbook	
<b>Tools, Equipment and Other Requirements</b>	
Materials and tools and equipment used at work	



## Module 24: Energy/Electricity Conservation

*Mapped to SGJ/N1702 v 1.0*

### Terminal Outcomes:

- Discuss optimal usage of energy/electricity

<b>Duration:</b> 04:00		<b>Duration:</b> 08:00	
<b>Theory – Key Learning Outcomes</b>		<b>Practical – Key Learning Outcomes</b>	
<ul style="list-style-type: none"><li>• Define electricity</li><li>• Discuss the basics of electricity</li><li>• List the energy efficient devices that are used in the job</li><li>• Discuss the ways to identify electrical problems that can arise during work</li><li>• Discuss the standard practices to be followed for conserving electricity in the job</li><li>• State the impact of improperly connected electrical equipment and appliances on the tasks being performed</li></ul>		<ul style="list-style-type: none"><li>• Apply suitable techniques to check the equipment/machinery for desired level of functioning</li><li>• Employ appropriate methods to rectify faulty equipment/machinery safely</li><li>• Roleplay a situation on how to report equipment faults and maintenance lapses to the concerned personnel effectively</li></ul>	
<b>Classroom Aids:</b>			
Computer, Projection Equipment, PowerPoint Presentation and software, Facilitator's Guide, Participant's Handbook			
<b>Tools, Equipment and Other Requirements</b>			
Energy saving devices			

## Module 25: Waste Management/Recycling

### Mapped to SGJ/N1702 v 1.0

#### Terminal Outcomes:

- Discuss the importance of minimal waste generation
- Demonstrate how to dispose waste as per industry approved standards

<b>Duration:</b> 04:00	<b>Duration:</b> 08:00
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul style="list-style-type: none"> <li>• List the various types of recyclable, non-recyclable, and hazardous waste</li> <li>• State the significance of different coloured dustbins</li> <li>• List the different types of waste to be segregated</li> <li>• State the importance of waste management</li> <li>• Discuss the standard methods for waste disposal</li> <li>• List the sources of pollution.</li> <li>• Discuss the ways to minimise various types of pollution</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate the standard practices to be followed for segregating waste into respective categories</li> <li>• Show how to dispose non-recyclable waste appropriately and safely</li> <li>• Demonstrate the standard practice for depositing recyclable and reusable materials at designated place</li> <li>• Show how to dispose hazardous waste safely and appropriately</li> </ul>
<b>Classroom Aids:</b>	
Computer, Projection Equipment, PowerPoint Presentation and software, Facilitator's Guide, Participant's Handbook	
<b>Tools, Equipment and Other Requirements</b>	
Non-recyclable, recyclable waste bins	

# Annexure

## Trainer Requirements

Trainer Prerequisites						
Minimum Educational Qualification	Specialization	Relevant Industry Experience		Training Experience		Remarks
		Years	Specialization	Years	Specialization	
Graduate	Food Science/Home Science/ Food Processing/ Processing-Dairy Products	3	Food Science/Home Science/ Food Processing/ Processing-Dairy Products	3	Food Science/Home Science/ Food Processing/ Processing-Dairy Products	

Trainer Certification	
Domain Certification	Platform Certification
“Artisanal Cheese Maker- Entrepreneur”, “FIC/Q2008, V1.0”, Minimum accepted score is 80%	“Trainer”, “MEP/Q2601, V1.0” with a scoring of minimum 80%

## Assessor Requirements

Assessor Prerequisites						
Minimum Educational Qualification	Specialization	Relevant Industry Experience		Training Experience		Remarks
		Years	Specialization	Years	Specialization	
Graduate	Food Science/Home Science/ Food Processing/ Processing-Dairy Products	5	Food Science/Home Science/ Food Processing/ Processing-Dairy Products	1	Food Science/Home Science/ Food Processing/ Processing-Dairy Products	

Trainer Certification	
Domain Certification	Platform Certification
“Artisanal Cheese Maker- Entrepreneur”, “FIC/Q2008, V1.0”, Minimum accepted score is 80%	“Trainer”, “MEP/Q2601, V1.0” with a scoring of minimum 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.

### 1. Assessment System Overview:

- Batches assigned to the assessment agencies for conducting the assessment on SDSM/SIP or email
- Assessment agencies send the assessment confirmation to VTP/TC looping SSC
- Assessment agency deploys the ToA certified Assessor for executing the assessment
- SSC monitors the assessment process & records
- If the batch size is more than 30, then there should be 2 Assessors.

### 2. Testing Environment: Assessor must:

- Confirm that the centre is available at the same address as mentioned on SDMS or SIP
- Check the duration of the training.
- Check the Assessment Start and End time to be as 10 a.m. and 5 p.m.
- Check that the allotted time to the candidates to complete Theory & Practical Assessment is correct.
- Check the mode of assessment—Online (TAB/Computer) or Offline (OMR/PP).
- Confirm the number of TABs on the ground are correct to execute the Assessment smoothly.
- Check the availability of the Lab Equipment for the particular Job Role.

### 3. Assessment Quality Assurance levels / Framework:

- Question papers created by the Subject Matter Experts (SME)
- Question papers created by the SME should be verified by the other subject Matter Experts along with the approval required from SSC
- Questions are mapped with NOS and PC
- Question papers are prepared considering that level 1 to 3 is for the unskilled & semi-skilled individuals, and level 4 and above are for the skilled, supervisor & higher management
- Assessor must be ToA certified
- Assessment agency must follow the assessment guidelines to conduct the assessment

### 4. Types of evidence or evidence-gathering protocol:

- Time-stamped & geotagged reporting of the assessor from assessment location
- Centre photographs with signboards and scheme specific branding
- Biometric or manual attendance sheet (stamped by TP) of the trainees during the training period
- Time-stamped & geotagged assessment (Theory + Viva + Practical) photographs & videos

### 5. Method of verification or validation:

- Surprise visit to the assessment location
- Random audit of the batch

- Random audit of any candidate
6. Method for assessment documentation, archiving, and access
- Hard copies of the documents are stored
  - Soft copies of the documents & photographs of the assessment are uploaded / accessed from Cloud Storage and are stored in the Hard Drives

## References

## Glossary

Term	Description
<b>Declarative Knowledge</b>	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.
<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>Procedural Knowledge</b>	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.
<b>Training Outcome</b>	Training outcome is a statement of what a learner will know, understand and be able to do <b>upon the completion of the training</b> .
<b>Terminal Outcome</b>	Terminal outcome is a statement of what a learner will know, understand and be able to do <b>upon the completion of a module</b> . 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
TVET	Technical and Vocational Education and Training
SOP	Technical and Vocational Education and Training
OH&S	Occupational Health and Safety
PPE	Personal Protective Equipment
HACCP	Hazard Analysis and Critical Control Points
VACCP	Vulnerability Assessment Critical Control Points
TACCP	Threat Assessment Critical Control Points
FSSAI	Food Safety and Standards Authority of India
FIFO	First In First Out
FEFO	First Expire First Out
GMP	Good Manufacturing Practices
GHP	Good Hygiene Practices
CPR	Cardiopulmonary Resuscitation