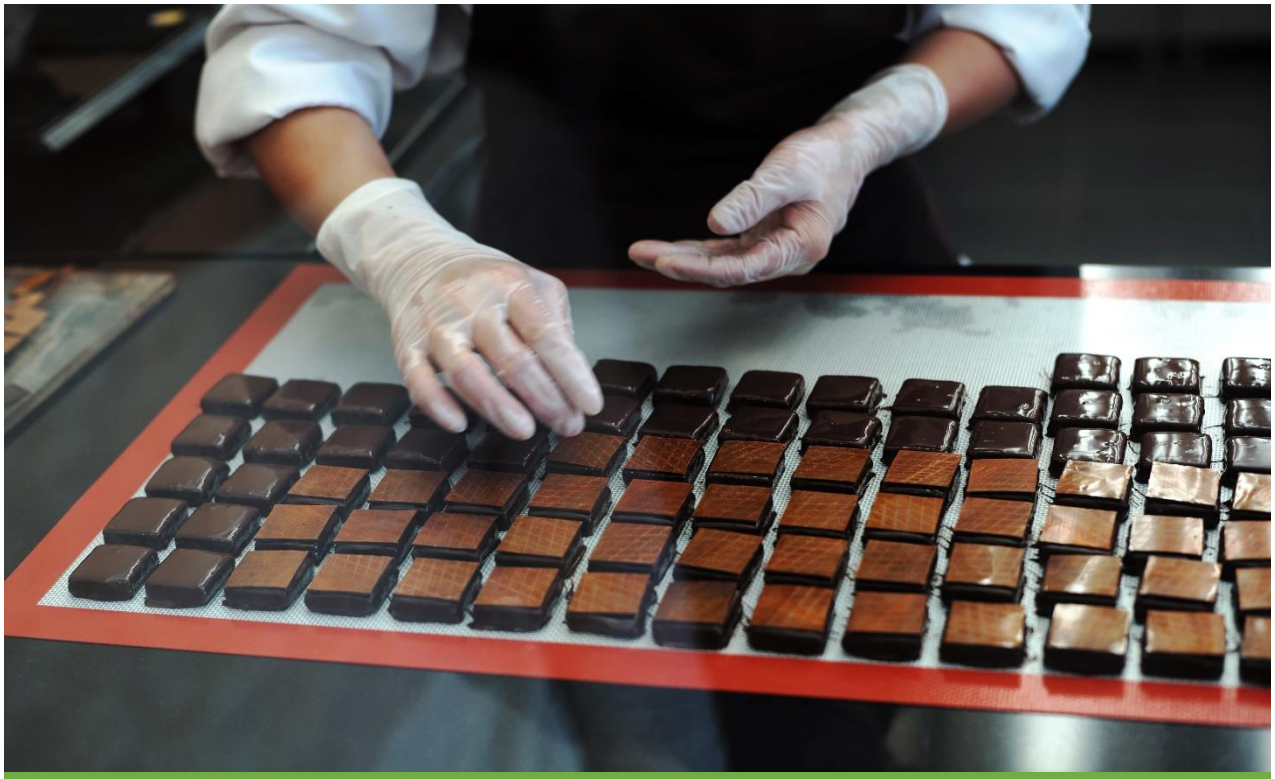

Model Curriculum

QP Name: Artisanal Chocolate Maker- Entrepreneur

QP Code: FIC/Q7101

QP Version: 1.0

NSQF Level: 4

Model Curriculum Version: 1.0

Food Industry Capacity and Skill Initiative (FICSI)
Shriram Bharatiya Kala Kendra (3rd Floor)
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Training Parameters

Sector	Food Processing
Sub-Sector	Confectionery
Occupation	Processing
Country	India
NSQF Level	4
Aligned to NCO/ISCO/ISIC Code	NCO-2015/7512.0800
Minimum Educational Qualification and Experience	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
Pre-Requisite License or Training	NA
Minimum Job Entry Age	18 years
Last Reviewed On	25/11/2021
Next Review Date	24/11/2024
NSQC Approval Date	25/11/2021
QP Version	1.0
Model Curriculum Creation Date	25/11/2021
Model Curriculum Valid Up to Date	24/11/2024
Model Curriculum Version	1.0
Minimum Duration of the Course	450 Hours

Maximum Duration of the Course	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 various tasks to prepare for chocolate production
- Carry out production of artisanal chocolates while adhering to standard work practices
- Inspect the quality of chocolates produced by conducting relevant tests
- Apply necessary health and safety practices during the entire work process
- Follow emergency procedures and infection control practices effectively
- Work with others effectively
- Use resources at the workplace optimally

Compulsory Modules

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

NOS and Module Details	Theory Duration	Practical Duration	On-the-Job Training Duration (Mandatory)	On-the-Job Training Duration (Recommended)	Total Duration
Bridge Module	**04:00**	**00:00**	**00:00**	**00:00**	**04:00**
Module 1: Introduction to Food Processing Sector and the Job of 'Artisanal Chocolate Maker'	04:00	00:00	00:00	00:00	04:00
FIC/N9905 – Establish Facilities for Artisanal Food Production **NOS Version No. 1.0** **NSQF Level 5**	**50:00**	**64:00**	**00:00**	**00:00**	**114:00**
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
FIC/N7101 – Prepare for Chocolate Production **NOS Version No. 1.0** **NSQF Level 4**	**34:00**	**52:00**	**00:00**	**00:00**	**86:00**
Module 6: Preparation for Chocolate Production	34:00	52:00	00:00	00:00	86:00
FIC/N7102 – Carry out Chocolate Production **NOS Version No. 1.0** **NSQF Level 4**	**42:00**	**110:00**	**00:00**	**00:00**	**152:00**
Module 7: Sieving, Mixing and Refining the Ingredients for Chocolate Recipes	18:00	34:00	00:00	00:00	52:00
Module 8: Tempering and Enrobing of Refined Chocolate Mixture	08:00	26:00	00:00	00:00	34:00
Module 9: Moulding / Extrusion of Chocolate	08:00	26:00	00:00	00:00	34:00
Module 10: Wrapping, Labelling and Managing the Finished Goods	08:00	24:00	00:00	00:00	32:00
FIC/N9904 – Ensure Food Safety at the Workplace **NOS Version No. 1.0** **NSQF Level 5**	**08:00**	**08:00**	**00:00**	**00:00**	**16:00**
Module 11: Basic Food Safety Standards	08:00	08:00	00:00	00:00	16:00
FIC/N9903 – Ensure Workplace Health and Safety **NOS Version No. 1.0** **NSQF Level 5**	**10:00**	**16:00**	**00:00**	**00:00**	**26:00**
Module 12: Follow Preventive Measures to avoid Accidents	02:00	04:00	00:00	00:00	06:00
Module 13: Manage Workplace Emergencies	04:00	08:00	00:00	00:00	12:00
Module 14: Manage Infection Control	04:00	04:00	00:00	00:00	08:00

FIC/N9902 – Work Effectively in an Organization **NOS Version No. 1.0** **NSQF Level 3**	**08:00**	**08:00**	**00:00**	**00:00**	**16:00**
Module 15: Working Effectively in an Organization	08:00	08:00	00:00	00:00	16:00
SGJ/N1702 – Optimize Resource Utilization at the Workplace **NOS Version No. 1.0** **NSQF Level 3**	**12:00**	**24:00**	**00:00**	**00:00**	**36:00**
Module 16: Material Conservation Practices	04:00	08:00	00:00	00:00	12:00
Module 17: Energy / Electricity Conservation Practices	04:00	08:00	00:00	00:00	12:00
Module 18: Waste Management Recycling Practices	04:00	08:00	00:00	00:00	12:00
Total Duration	**168:00**	**282:00**	**00:00**	**00:00**	**450:00**

Module Details

Module 1: Introduction to food processing sector and the job of 'Artisanal Chocolate Maker - Entrepreneur'

Bridge Module

Terminal Outcomes:

- Describe the food processing sector in brief
- Discuss the career opportunities available within the food processing sector

Duration: *04:00*	**Duration**: *00:00*
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
• Discuss the size and scope of the food processing industry in brief • Discuss the future trends and career growth opportunities available to artisanal chocolate makers in the food processing industry • Summarise the key roles and responsibilities of 'Artisanal Chocolate Maker' • List the various terminologies used in the process of artisanal chocolate making • Discuss the standards to be followed for handling hazards and ensuring a clean work area	
Classroom Aids:	
Computer, Projection Equipment, PowerPoint Presentation and software, Facilitator's Guide, Participant's Handbook.	
Tools, Equipment and Other Requirements	
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

Duration: *16:00*	**Duration**: *06:00*
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
• Outline the various legislations, regulations, and standards including FSSAI guidelines to be followed to produce artisanal product • State the importance of analysing and investigating the purpose and intent of legislation related to various factors • List the authorities responsible for administering legislation for setting up a food processing facility • Outline the procedure and importance of site inspections, reporting variances, and obtaining legislative approvals • List the material and equipment requirements for setting up a production facility • State the significance of obtaining the accurate information from designated personnel in various recorded forms, like checklists, etc.	• Apply appropriate practices to assess workplace and food safety systems to determine compliance as per production needs • Employ appropriate practices to establish standard procedures to ensure compliance with legal requirements • Apply appropriate practices to identify and report non-compliance with the legislative guidelines to the concerned authority • Show how to update all the relevant document for future reference
Classroom Aids:	
Training kit (Trainer guide, Presentations), Whiteboard, Marker, Projector, Laptop, Presentation, Participant Handbook, etc.	
Tools, Equipment, and Other Requirements	
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

Duration: *08:00*	**Duration**: *16:00*
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
• List various ingredients used in different recipes of artisanal production • Describe various ways to upgrade the existing recipes and developing new ones • Outline the importance of conceptualizing new ideas and experimenting with various combinations of old and new ingredients to develop new products • Discuss various types of cost optimization techniques that can be used in the job	• Employ appropriate practices to formulate recipes and methodologies in accordance with customer needs and product types • Apply appropriate practices to experiment with new and existing methods of production to develop new production methods for a variety of products • Employ appropriate practices to evaluate the quality of production methods to validate and standardize the best product formulation method • 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. • Demonstrate how to calculate the cost of the final product and fix the unit price of the product as per standard
Classroom Aids:	
Training kit (Trainer guide, Presentations), Whiteboard, Marker, Projector, Laptop, Presentation, Participant Handbook	
Tools, Equipment, and Other Requirements	
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.

Duration: *02:00*	**Duration**: *02:00*
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
• State the importance of identifying the equipment and materials to be procured before setting up a production facility • Discuss the procedure to inspect the quality of the procured material and equipment • Outline the applicability and capacity of various equipment used in artisanal production • Discuss the key considerations in vendor management • Discuss the standard procedure for reporting and documentation pertaining to production facility	• Apply appropriate practices to identify and select vendors for sourcing raw materials, packaging materials, and equipment for production • Employ appropriate inspection methods to check and verify the quality of materials received from the vendors as per standards • Show how to maintain various material records and other documents such as equipment manuals, manufacturers' instructions, etc.
Classroom Aids:	
Training kit (Trainer guide, Presentations), Whiteboard, Marker, Projector, Laptop, Presentation, Participant Handbook	
Tools, Equipment, and Other Requirements	
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**
• Discuss own strengths and weaknesses and analyse the gaps to ensure continuous improvement • Discuss the measures to be undertaken to utilise time effectively thereby achieving maximum productivity • Describe how to plan effective strategies for solving problems and improving work culture within the team • List the various types of digital marketing techniques • Discuss the importance of e-commerce in promoting businesses • List the various types of online banking services being used widely • List the elements of a proposal to attract future business opportunities and prospective clients • Explain how to conduct entrepreneurial programs to identify business opportunities, generate employment and increase clientele	• Show how to analyse a situation to identify gaps for improving the work process. • Demonstrate the procedure to plan the time taken to perform various tasks effectively • Prepare a sample plan to solve problems and improve productivity at the workplace. • Demonstrate the procedure to operate a computer for digital marketing, e-commerce, branding, etc. • Show how to use services such as NEFT, IMPS, UPI, RTGS for online banking • Prepare a detailed sample report consisting of information such as future investments, forecasting, business expansion, etc. • Demonstrate the procedure to conduct an entrepreneurial program for exploring business opportunities and increasing the clientele
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: Preparation for chocolate production

Mapped to FIC/N3039 v 1.0

Terminal Outcomes:

- Discuss the standard practices to be followed for planning the chocolate production
- Demonstrate the tasks to be performed at the workplace for planning the chocolate production

Duration: *34:00*	**Duration:** *52:00*
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
• Discuss the standard practices that are followed to obtain various requirements such as order, quantity, and type of chocolate to be produced from respective sources, such as individuals, organizational departments, etc. • Discuss the standardized production plan for chocolate making • Describe the production process basis the flowchart, formulation charts, etc. • Outline the importance of allocating responsibilities to the team and creating contingency plan • Recall the various types of documentation done and the information to be recorded in the work process • List the waste and hazardous materials present / generated at the workplace and discuss the importance of periodic cleanliness required to maintain the work area for production • List the industry approved sanitizers and discuss the impact of not using them • List the key considerations for arranging equipment required to clean the work area	• Demonstrate the procedure for procuring the required raw materials, and packaging materials from respective sources • Apply standard practices to organize the batch size order based on production order and machine capacity • Display how to calculate the raw materials, packaging materials, machine utilization and manpower required for production • Prepare a sample production plan detailing the quantity, quality of raw materials, timelines, budgetary requirements, tools, and equipment, etc. accurately • Show how to clean the work area thoroughly using industry approved sanitizers • Demonstrate the standard procedure followed to inspect work area thoroughly for the presence of waste and hazardous materials • Apply standard practices to replace defective material and to follow the process of disposing them safely

• Summarize the legal regulations concerning health and safety • Describe the standard practices to identify and replace defective material by following the process of disposing them safely • Discuss the impact of various kinds of hazardous material on the production • Discuss the importance of periodic maintenance of process machinery and tools. • Discuss the risk and impact of not inspecting the tools, equipment, and machinery per the defined procedures. • Summarise the various steps to be performed for cleaning the production tools, equipment, and machinery through approved cleaning agents • Illustrate the key considerations for assembling the materials as per the standard work practices • Summarize the legal regulations concerning health and safety • List the designated sources for receiving the required material(s) for production • Elucidate the conditions required for storing materials appropriately and impact of not adhering to industry recommended practices • Explain the various types of physical, chemical, and biological hazards that could affect the quality of materials received • Describe the standard action to be taken for handling substandard ingredients and the importance of timely reporting to address issues	• Demonstrate the application of supplier / manufacturer's instructions while cleaning • Illustrate the relevance of dosage for using sanitizers and disinfectants • Show how to dispose unwanted (such as broken, chipped or cracked equipment, spoiled material, etc.) and hazardous materials safely as per standard work practices • Demonstrate the procedure followed to clean the production tools, equipment, and machinery through approved cleaning agents • Exhibit the mechanism for inspecting the production tools, equipment, and machinery • Demonstrate the procedure to assemble the materials used for production as per standard work practices • Illustrate the relevance of dosage for using cleaning agents • Demonstrate how to inspect the materials received from designated sources • Exemplify the process to test the sample of materials for desired characteristics such as organoleptic evaluation, chemical and biological testing, etc. • Represent the preparation of sample reports to capture the observations of testing the sample of materials • Illustrate how to prepare sample records for recording information concerning substandard material • Enact a situation on how to communicate the issues such as faulty material, etc. to the concerned authority • Apply suitable techniques to organize the ingredients as per production plan

• State the importance of marking for identifying defective material • Explain the different stock rotation techniques such as First In First Out (FIFO) and First Expire First Out (FEFO), etc. • List the types of information to be recorded while maintaining the material such as raw material used, quality test reports, etc.	

Classroom Aids:
Computer, Projection Equipment, PowerPoint Presentation and software, Facilitator's Guide, Participant's Handbook

Tools, Equipment and Other Requirements
Process related documents, list of raw materials, tools, equipment and machinery, organizational documents, logbook, various types of sanitisers and disinfectants, trash bins for waste material disposal, equipment for cleaning, procedural manual for reference, production tools, equipment and machinery, various types of cleaning agents, equipment for cleaning, procedural manual for reference, Raw materials, packaging material and finished products in the food processing industry; spoiled material, utensils, organisational documents (such as logbooks), cleaning agent, sanitising agents, etc.

Module 7: Sieving, mixing, and refining the ingredients for chocolate recipes
Mapped to FIC/N3040 v 1.0

Terminal Outcomes:

- Explain the methods involved in processing ingredients, sieving, mixing and refining processes for chocolate recipes
- Demonstrate the process to be followed for producing the chocolate recipes

Duration: *18:00*	**Duration:** *34:00*
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
• Detail the defined frequencies for examining the intactness of the sieve • Particularize how the mixing machines works • List the physical contaminants to look for while sieving cocoa powder and refined sugar • Explain the various physical parameters of the mixing machine to mix the ingredients as per standard operating procedure • Underline the quantity of the ingredient used in mixing and refining process • Emphasize the cruciality of the settings of refiner and conch for preparing the liquid chocolate • Illustrate the significance of heat preservation storage (in storage tanks) of chocolate slurry after fine mixing to meet the technological requirements of chocolate production • Explain what kind of observations and findings are relevant and crucial to record as per standard practice	• Demonstrate the process of calculating the quantities of ingredients required to meet production needs • Illustrate the use of the tools, such as, weighing machine, etc. for measuring the required quantities of the ingredient • Exhibit pre-processing tasks such as blending, heating, pre-mixing, etc. as per production requirements • Exemplify how to validate the substandard ingredients • Demonstrate the process of storing and positioning the ingredients following the health, safety, and organizational requirements • Get a sample label created specifying the information required to store the ingredients • Demonstrate the complete process of sieving the cocoa powder and refined sugar • Walk through how to set the machine physical parameters such as temperature, weight, revolutions per minute (RPM), etc. and monitor the parameters frequently • Illustrate the process of mixing the ingredients using stirring / automatic mixer in accordance with SOP

	• Demonstrate the procedure to transfer the mix from mixing tank to refiner and then to conch where liquid chocolate is to be prepared • Demonstrate how to check the consistency of the mixture along with the flow after it is transferred to storage tanks • Exemplify through a sample the structure of recording the observations and findings of the complete process
Classroom Aids:	
Computer, Projection Equipment, PowerPoint Presentation and software, Facilitator's Guide, Participant's Handbook	
Tools, Equipment and Other Requirements	
Specific ingredients for producing various types of chocolates (such as plain chocolate, milk chocolate, white chocolate, sugar free chocolate), kitchen scales, tools used for blending, pre-mixing, etc., roaster, labelling material, storage material, mixing machine to batch or continuously mix chocolate, Refiner(s) / conching refining machine, sieves, storage tank, thermometer, organizational documents for reference	

Module 8: Tempering and enrobing of refined chocolate mixture

Mapped to FIC/N3040 v 1.0

Terminal Outcomes:

- Explain the methods involved in tempering and enrobing of refined chocolate mixture
- Demonstrate the tempering and enrobing process of refined chocolate mixture

Duration: *08:00*	**Duration:** *26:00*
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
• Detail the importance of tempering, and what happens to chocolate if it is not tempered • List the various kinds of tempering methods • Explain the change in the condition of a product upon applying heat and importance of controlling the degree of temper • Explain the different methods of tempering chocolate in production • Appraise the stages involved in enrobing process, the sequence in which they are performed and their significance • Particularize the typical parts of enrobing machine • Detail how to operate, regulate and shut down the relevant equipment required for tempering and enrobing • Explain the process to deal with disposal of waste and with items that can be re-cycled • Emphasize on recording, reporting and communication needed at each stage, how to carry this out and the reasons why it is important to do so	• Demonstrate how to start and shutdown the equipment required for tempering and enrobing • Illustrate the variation of temperature during the tempering process • Show the processes involved in tempering and highlight their purpose • Walk through over the typical parts of an enrobing machine and their function • Demonstrate the stages involved in the enrobing process and list the materials used in specified quantity • Exemplify through a sample the structure of recording the observations and findings of the complete process • Enact the reporting and communication required at each stage
Classroom Aids:	
Computer, Projection Equipment, PowerPoint Presentation and software, Facilitator's Guide, Participant's Handbook	
Tools, Equipment and Other Requirements	
Tempering machine, enrobing machine, thermometer, utensils, etc.	

Module 9: Moulding/Extrusion of chocolate

Mapped to FIC/N3040 v 1.0

Terminal Outcomes:

- Explain the methods involved in moulding or extrusion of chocolate
- Demonstrate the process of moulding or extrusion of chocolate

Duration: *08:00*	**Duration:** *26:00*
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
• Enumerate the purpose and importance of moulding chocolate • List the different types of moulding plants used, and their purpose • Explain the de-moulding of chocolate along with the consistency required to maintain at this stage • Explicate the necessary procedures for moulding and the impact of not following the process specification • Detail how to operate, regulate and shut down the relevant equipment required for moulding • Explain the importance of analysis at moulding stage • Particulate whom to connect at the quality lab for analysis of the samples and the analytical reports • Explain the process to deal with disposal of waste and with items that can be re-cycled • Emphasize on recording, reporting and communication needed at each stage, how to carry this out and the reasons why it is important to do so	• Demonstrate the process of transferring the liquid chocolate material in feeding hopper • Display the mechanism to monitor the process parameters (such as, temperature, pressure, RPM, flow rate, particle size) and product parameters (such as weight, shape, and size of product, etc.) • Illustrate the processes involved in conditioning the moulds prior to moulding and the definite moulding process • Demonstrate how to start and shutdown the equipment required moulding • Illustrate the variation of temperature during the moulding process • Exemplify through a sample the structure of recording the observations and findings of the complete process • Enact the reporting and communication required at each stage
Classroom Aids:	
Computer, Projection Equipment, PowerPoint Presentation and software, Facilitator's Guide, Participant's Handbook	
Tools, Equipment and Other Requirements	
Chocolate moulding line, feeding hopper, operations manual for reference, sample of the produced chocolate, different types of moulds, etc.	

Module 10: Wrapping, labelling, and managing the finished goods
Mapped to FIC/N3040 v 1.0

Terminal Outcomes:

- Explain the procedure of wrapping, labelling and storing the chocolates produced
- Demonstrate the procedure of wrapping, labelling and storing the chocolates

Duration: *08:00*	**Duration:** *24:00*
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
• Enumerate the purpose and importance of wrapping and labelling • Emphasize on carrying out wrapping and labelling procedures in an efficient manner. • List the ways to carry out wrapping and labelling • Explain the importance of accurate labelling information and the impact of inaccuracy • List the potential allergens and the consequences of not listing ingredients clearly on labels • Explicate the way of presenting the labelling information including nutritional information • Detail how to operate, regulate and shut down the relevant equipment required • Emphasize on recording, reporting and communication needed at each stage, how to carry this out and the reasons why it is important to do so • Explicate the handling and storing of finished products • Define the importance of temperature and conditions employed for storing wrapped chocolate • Enumerate the arrangement of stock in allocated locations, ensuring awareness of	• Demonstrate the process of loading packaging material on the machine • Show how to load the chocolates on packaging conveyor ensuring product safety • Exhibit how to operate, regulate, and shut down the relevant equipment • Illustrate the ways to control infeed, progress of products, output of wrapped and labelled products as per the specifications • Walkthrough the process of decorating the packed chocolates as per occasion, festivities, customer demands, etc. • Prepare sample information for recording of finished products (such as name of the product, batch number, time of packing, date of manufacture, date of expiry, other label details, primary and secondary packaging materials for all finished products, storage conditions etc.) as per standard work practices • Illustrate the procedure of inspecting the finished products before dispatch • Stage the coordination / communication with vendors for further distribution to individuals and organizations • Facilitate to prepare the sample information for quality and quantity of goods supplied, vendor details, customer

the principles of first in/first out, and stock control • List the precautions to protect chocolate from spoiling by bacteria • Emphasize why chocolate should be protected from moisture and what would happen to the product if it were not • Explain the importance of recording information for quality and quantity of goods supplied, vendor details, customer details, material receipts, time of shipment, etc. • Detail the significance of reporting difficulties in placing products to the concerned person • Define how to prepare contingency plans when low or no product is available • Emphasize on recording, reporting and communication needed at each stage, how to carry this out and the reasons why it is important to do so	details, material receipts, time of shipment, etc. • Demonstrate handling chocolate in accordance with safe and hygienic working practices
Classroom Aids:	
Computer, Projection Equipment, PowerPoint Presentation and software, Facilitator's Guide, Participant's Handbook	
Tools, Equipment and Other Requirements	
Packaging conveyor, packaging machine(s), labelling machines, packaging material, relevant formats and reports, procedure manual, finished product, tools to measure the temperature and moisture of the location, etc.	

Module 11: 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.

Duration: *08:00*	**Duration**: *08:00*
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
• List the types of biological, chemical and physical hazards present in the food processing industry • Discuss various types of food contaminations, their causes, and ways to prevent them • Discuss the importance of following the standard procedures for ensuring food safety) • 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 • 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 • Discuss the role of HACCP, VACCP and TACCP as well as procedures to implement these in the food industry • Discuss about product information and consumer awareness, product recall and withdrawal, and traceability • Explain the procedure to conduct workplace food safety audits	• 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 • Employ appropriate practices to implement food safety procedures and regulatory policies at the workplace • 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. • Demonstrate the procedure followed for allergen management and handling and storage of raw materials • Apply appropriate practices to establish and follow monitoring systems, like Hazard Analysis Critical Control Point (HACCP) • Apply relevant practices to take appropriate action in instances such as VACCP (Vulnerability Assessment Critical Control Points) and TACCP

• Discuss various types of allergens and their management at the workplace • Discuss the corrective measures to be applied to ensure food safety • List various issues that can arise during food production and other processes • Discuss the procedure of performing root cause analysis and taking corrective and preventive actions against workplace problems • State the significance of training the team members regarding various food safety procedures such as GMP, HACCP, etc. • List the information to be recorded in the work process	(Threat Assessment Critical Control Points) • Apply appropriate practices to plan and execute an audit on food safety address the non-conformance with root cause analysis (RCA), and take corrective action preventive action (CAPA) • Role play a situation on how to address issues pertaining to food safety and quality reported by the team members • Prepare sample reports for food safety regulations followed, inspections done, faults observed, etc. • Dramatize a situation on how to organize training and workshops on food safety aspects such as Good Manufacturing Practices (GMP), HACCP, VACCP, TACCP, etc.
Classroom Aids:	
Training kit (Trainer guide, Presentations), White board, Marker, Projector, Laptop, Presentation, Participant Handbook and Related Standard Operating Procedures	
Tools, Equipment and Other Requirements	
Sample pictures of various biological, chemical, and physical hazards, Sample pictures of Contaminants, samples of potential allergens, process flow chart and HACCP plan.	

Module 12: 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**
• Define 'hazards' and 'risks' • 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 • State the importance of maintaining the equipment effectively • Discuss the standard practices to be followed to control and prevent risks, hazards, and accidents • Discuss the various types of safety signs and their relevance at the workplace • State the significance of displaying the common hazard signages wherever required • Outline the importance of ensuring the availability of general health and safety equipment at all times • Describe the causes of fire, ways to prevent them and rescue techniques to be followed at times of fire at the workplace • Outline the purpose and usage of various Personal Protective Equipment (PPE) required at the workplace	• Demonstrate how to use and dispose of relevant personal protective equipment as per tasks and work conditions • Show how to implement organisational safety protocols to prevent accidents and hazards at the workplace • 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
Classroom Aids:	

Training kit (Trainer guide, Presentations), White board, Marker, Projector, Laptop, Presentation, Participant Handbook and Related Standard Operating Procedures
Tools, Equipment and Other Requirements
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 12: 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

Duration: *04:00*	**Duration**: *08:00*
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
• Discuss workplace emergency and evacuation procedures and the importance of following them • Explain the procedure to be followed for administering immediate first aid to victims in case of cuts, bleeding, burns, choking, electric shock, poisoning, etc. • Discuss the procedure to be followed for providing artificial respiration and cardio-pulmonary resuscitation (CPR) to the affected person and highlight its significance • State the impact of health, safety and security breaches on self, team, and work process	• Demonstrate the procedure to be followed to free a person from electrocution safely • Show how to administer appropriate first aid procedure to victims in case of cuts, bleeding, burns, choking, electric shock, poisoning, etc. • Demonstrate the procedure e followed provide artificial respiration and cardio-pulmonary resuscitation (CPR) in various instances (e.g., cardiac arrest) • 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 • 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
Classroom Aids:	

Training kit (Trainer guide, Presentations), White board, Marker, Projector, Laptop, Presentation, Participant Handbook and Related Standard Operating Procedures
Tools, Equipment and Other Requirements
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 13: 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**
• List the general sources of infections • 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 • Explain various ways to store the sanitization materials appropriately • Discuss various types of potential infections along with the precautionary measures to be taken, and safety protocols to be followed at the workplace • Discuss appropriate actions to be taken during illness to self and others at the workplace • Describe the parameters to be assessed during health and safety audits, their acceptability levels of appropriateness and the procedure to conducting these audits • 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 • State the importance of undergoing preventive health check-ups organized	• Employ appropriate practices to follow and enforce Good Hygiene Practices (GHP) among the team members • Employ appropriate practices to store sanitisation materials effectively • 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

by the organisation in compliance with FSSAI guidelines • List various types of documents and records to be maintained in the work process	
Classroom Aids:	
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 14: 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**
• Discuss the applicable organisational quality procedures and processes for working effectively in a team • Elucidate the legislations, standards, policies, and procedures followed in the organization relevant to employment, behaviour, harassment, discrimination, and performance conditions • State the importance of well-defined reporting structure in an organisation. List the various types of inter-dependent functions applicable in the job • Discuss the different types of harassment and discrimination based on gender, disability, caste, religion, and culture • List the key factors that aid in prioritising tasks • Discuss the components of effective communication and its importance at the workplace • State the impact of poor communication on the employee, the employer, and the customer • State the importance of teamwork in organizational and individual success.	• Roleplay a situation on how to obtain information, seek clarifications, reciprocate understanding and provide information accurately and clearly • 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 • Show how to consult and assist others to maximize effectiveness and efficiency at work • Dramatize a situation to show how to escalate problems and grievances beyond own scope to the concerned authority • Roleplay a situation on how to take appropriate action to resolve conflicts at the workplace • Roleplay a situation on how to report incidents of harassment and discrimination to appropriate authority

• Discuss the importance of ethics and discipline for professional success • Explain the ways to address grievances appropriately and effectively • Discuss the importance of managing interpersonal conflicts effectively and ways to do so • List the different types of disabilities and the challenges faced by persons with disability (PwD) • Discuss the applicable laws, acts and provisions defined for PwD by the statutory bodies • State the importance of gender sensitivity and equality • Discuss the applicable legislations, grievance redressal mechanisms, and penalties against harassment at the workplace • State the importance of transacting with others without personal bias	

Classroom Aids:
Computer, Projection Equipment, PowerPoint Presentation and software, Facilitator's Guide, Participant's Handbook
Tools, Equipment and Other Requirements
Nil

Module 15: Material Conservation Practices

Mapped to SGJ/N1702 v 1.0

Terminal Outcomes:

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

Duration: *04:00*	**Duration**: *08:00*
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
• List the types of hazards, risks and threats associated with handling different materials • Discuss the role of workstation layout, electrical and thermal equipment used in the material conservation • Discuss organisational procedures for minimising waste • Elucidate practices of efficient and inefficient management and utilization of material and water at the workplace • Discuss the ways to manage material and water usage at work effectively	• Show how to check for spills and leakages in various materials applicable in the job • Demonstrate how to plug the spills and leakages appropriately • Roleplay a situation on how to escalate any issues related to repair of spills and leakages to the concerned authority effectively • Demonstrate the standard practices to be followed for cleaning tools, machines and equipment effectively
Classroom Aids:	
Computer, Projection Equipment, PowerPoint Presentation and software, Facilitator's Guide, Participant's Handbook	
Tools, Equipment and Other Requirements	
Materials and tools and equipment used at work	

Module 16: Energy/Electricity Conservation Practices

Mapped to SGJ/N1702 v 1.0

Terminal Outcomes:

- Discuss optimal usage of energy/electricity

Duration: *04:00*	**Duration**: *08:00*
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
• Define electricity • Discuss the basics of electricity • List the energy efficient devices that are used in the job • Discuss the ways to identify electrical problems that can arise during work • Discuss the standard practices to be followed for conserving electricity in the job • State the impact of improperly connected electrical equipment and appliances on the tasks being performed	• Apply suitable techniques to check the equipment/machinery for desired level of functioning • Employ appropriate methods to rectify faulty equipment/machinery safely • Roleplay a situation on how to report equipment faults and maintenance lapses to the concerned personnel effectively
Classroom Aids:	
Computer, Projection Equipment, PowerPoint Presentation and software, Facilitator's Guide, Participant's Handbook	
Tools, Equipment and Other Requirements	
Energy saving devices	

Module 17: Effective Waste Management/Recycling Practices
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

Duration: *04:00*	**Duration**: *08:00*
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
• List the various types of recyclable, non-recyclable, and hazardous waste • State the significance of different coloured dustbins • List the different types of waste to be segregated • State the importance of waste management • Discuss the standard methods for waste disposal • List the sources of pollution. • Discuss the ways to minimise various types of pollution	• Demonstrate the standard practices to be followed for segregating waste into respective categories • Show how to dispose non-recyclable waste appropriately and safely • Demonstrate the standard practice for depositing recyclable and reusable materials at designated place • Show how to dispose hazardous waste safely and appropriately
Classroom Aids:	
Computer, Projection Equipment, PowerPoint Presentation and software, Facilitator's Guide, Participant's Handbook	
Tools, Equipment and Other Requirements	
Non-recyclable, recyclable waste bins	

Annexure

Trainer Requirements

Trainer Prerequisites						
Minimum Educational Qualification *<Select the minimum educational requirements, such as 12th Pass, Graduate or NSQF certified.>*	**Specialization** *<Specify the areas of specialization that are desirable.>*	**Relevant Industry Experience**		**Training Experience**		**Remarks**
		Years	***Specialization***	***Years***	***Specialization***	
Graduate / Diploma	Food Technology or Engineering /Food Science/Home Science	3	Supervisor-Bakery Products	1	Baking procedure or culinary skills	

Trainer Certification	
Domain Certification	**Platform Certification**
Certified for Job Role: "Artisanal Chocolate Maker- Entrepreneur" mapped to QP: "FIC/Q7102, v1.0". Minimum accepted score is 80%.	Recommended that the Trainer is certified for the Job Role: "Trainer", mapped to the Qualification Pack: "MEP/Q2601". Minimum accepted score as per MEPSC guidelines is 80%.

Assessor Requirements

Assessor Prerequisites						
Minimum Educational Qualification *<Select the minimum educational requirements, such as 12th Pass, Graduate or NSQF certified.>*	**Specialization** *<Specify the areas of specialization that are desirable.>*	**Relevant Industry Experience**		**Training/Assessment Experience**		**Remarks**
		Years	***Specialization***	***Years***	***Specialization***	
Graduate / Diploma	Food Technology or Engineering /Food Science/Home Science	3	Supervisor – Bakery Products	2	Baking procedure or culinary skills	

Assessor Certification	
Domain Certification	**Platform Certification**
Certified for Job Role: "Artisanal Chocolate Maker- Entrepreneur" mapped to QP: "FIC/Q7102, v1.0". Minimum accepted score is 80%.	Recommended that the Assessor is certified for the Job Role: "Assessor", mapped to the Qualification Pack: "MEP/Q2701". Minimum accepted score as per MEPSC guidelines is 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 centers 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. Therein 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 bank so 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 behavioral aspects as regards the job role and the specific task at hand.

References

Glossary

Term	Description
Declarative Knowledge	Declarative knowledge refers to facts, concepts and principles that need to be known and/or understood in order to accomplish a task or to solve a problem.
Key Learning Outcome	Key learning outcome is the statement of what a learner needs to know, understand and be able to do in order to achieve the terminal outcomes. A set of key learning outcomes will make up the training outcomes. Training outcome is specified in terms of knowledge, understanding (theory) and skills (practical application).
OJT (M)	On-the-job training (Mandatory); trainees are mandated to complete specified hours of training on site
OJT (R)	On-the-job training (Recommended); trainees are recommended the specified hours of training on site
Procedural Knowledge	Procedural knowledge addresses how to do something, or how to perform a task. It is the ability to work, or produce a tangible work output by applying cognitive, affective or psychomotor skills.
Training Outcome	Training outcome is a statement of what a learner will know, understand and be able to do **upon the completion of the training**.
Terminal Outcome	Terminal outcome is a statement of what a learner will know, understand and be able to do **upon the completion of a module.** A set of terminal outcomes help to achieve the training outcome.

Acronyms and Abbreviations

Term	Description
QP	Qualification Pack
NSQF	National Skills Qualification Framework
NSQC	National Skills Qualification Committee
NOS	National Occupational Standards
FIFO	First In First Out
FEFO	First Expire First Out
GMP	Good Manufacturing Practices
GHP	Good Hygiene Practices
CPR	Cardiopulmonary Resuscitation