

Model Curriculum

Craft Baker

SECTOR: FOOD PROCESSING

SUB-SECTOR: BREAD AND BAKERY

OCCUPATION: PROCESSING

REF. ID: FIC/Q5002, VERSION 1.0

NSQF LEVEL: 4



Certificate

CURRICULUM COMPLIANCE TO QUALIFICATION PACK – NATIONAL OCCUPATIONAL STANDARDS

is hereby issued by the

FOOD INDUSTRY CAPACITY AND SKILL INITIATIVE (FICSI)

for the

MODEL CURRICULUM

Complying to National Occupational Standards of
Job Role/Qualification Pack: 'Craft Baker' QP No. 'FIC/Q5002, NSQF Level 5'

Date of Issuance: January 12, 2016

Valid up to: July 02, 2016

* Valid up to the next review date of the Qualification Pack

Mohita Verma

Authorised Signatory
(Food Industry Capacity and Skill Initiative)

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Craft Baker

CURRICULUM / SYLLABUS

This program is aimed at training candidates for the job of a "Craft Baker", in the "Food Processing" Sector/Industry and aims at building the following key competencies amongst the learner

Program Name	Craft Baker		
Qualification Pack Name & Reference ID. ID	FIC/Q5002, version 1.0		
Version No.	1.0	Version Update Date	31/12/2015
Pre-requisites to Training	Class8		
Training Outcomes	<p>The programme will help in building the following key competencies amongst the learner:</p> <ul style="list-style-type: none"> • Prepare baked products in artisan bakeries and patisseries, conforming to all quality standards as per standard operating procedures • Operate oven and machineries/equipment • Follow and maintain food safety and hygiene in the work environment. 		

This course encompasses 5 out of 5 National Occupational Standards (NOS) of "Craft Baker" Qualification Pack FIC/Q5002, Version 1.0 issued by issued by Food Industry Capacity and Skill Initiative.

Sr. No.	Module	Key Learning Outcomes	Equipment Required
1	Introduction to the Training Program Theory Duration (hh:mm) 01:30 Practical Duration (hh:mm) 00:00 Corresponding NOS Code Bridge Module	<ul style="list-style-type: none"> Introduce each other and build rapport with fellow participants and the trainer 	White/Black board/ Chart paper, Markers
2	Overview of the Food Processing Industry Theory Duration (hh:mm) 02:00 Practical Duration (hh:mm) 00:00 Corresponding NOS Code Bridge Module	<ul style="list-style-type: none"> List the various sub-sectors of food processing industry Define food processing 	White/Black board/ Chart paper, Markers/ computer and projector, trainer's guide, student handbook
3	Bakery and Bakery Products Theory Duration (hh:mm) 04:30 Practical Duration (hh:mm) 00:00 Corresponding NOS Code Bridge Module	<ul style="list-style-type: none"> List the various products of the bread and bakery sub-sector List the various types of industries within the bakery sub-sector List the baked goods produced in artisan bakeries Explain the baking process 	White/Black board/ Chart paper, Markers/ computer and projector, Trainer's Guide, Student Handbook
4	Organizational Standards and Norms Theory Duration (hh:mm) 06:00 Practical Duration (hh:mm) 00:00	<ul style="list-style-type: none"> State the roles and responsibilities of a plant biscuit production specialist. State the standard operating procedures in the baking industry. State the personal hygiene and sanitation guidelines State the food safety hygiene standards to follow in a work environment. 	White/Black board/ Chart paper, Markers/ computer and projector, Trainer Guide, Student Handbook

Sr. No.	Module	Key Learning Outcomes	Equipment Required
	Corresponding NOS Code FIC/N5005 FIC/N9001		
5	Preparation and Maintenance of Work Area and Machineries Theory Duration (hh:mm) 08:00 Practical Duration (hh:mm) 15:00 Corresponding NOS Code FIC/N5005	<ul style="list-style-type: none"> Identify the different equipment used in the baking process State the materials and equipment used in cleaning and maintenance of the work area and machineries State the cleaning processes used to clean the work area Demonstrate the use of different equipment used in the bakery industry Identify the appropriate method for cleaning and maintaining work area Ensure the work area is safe and hygienic for food processing 	Ovens (Diesel), Ovens (Gas), Ovens(Elec.) Ovens(Wood) Baking sheet & Racks, Commercial Mixers, Wire whiskers, Baking Pan, Cooling racks, Measuring Cup & spoon, Thermometer, Digital Hygrometer, Fire extinguishers, High speed exhausts, Masks – Head cover, mouth cover, cleaning ingredients and tools
6	Food Microbiology Theory Duration (hh:mm) 07:00 Practical Duration (hh:mm) 00:00 Corresponding NOS Code Bridge Module	<ul style="list-style-type: none"> State the types of food microbes. State the causes for food spoilage. State the process for food spoilage. State the criteria to check food spoilage. State the need for food preservation. State the different types of food preservation processes. 	White/Black board/ Chart paper, Markers/ computer and projector, Trainer Guide, Student Handbook, samples of fresh and spoiled food
7	Preparation for the Baking Process Theory Duration (hh:mm) 06:00 Practical Duration (hh:mm) 09:00 Corresponding NOS Code FIC/N5006	<ul style="list-style-type: none"> Plan the production sequence to maximize capacity utilization of resources, manpower, and machinery Calculate batch size and prioritize urgent orders based on the production schedule and machine capacity Check the conformance of baking ingredient quality to company standards State the units of measurement used in the baking industry Identify the baking ingredients required for production as per production schedule and formation Organize quality baking ingredients as per production process and company standards Identify various fuels used in the baking industry 	Mixing bowl, Work table, Sinks, Measuring Cup & spoon, Thermometer, Timer, Digital Hygrometer, fuels, ingredients for baking process, weighing scale,

Sr. No.	Module	Key Learning Outcomes	Equipment Required
		<ul style="list-style-type: none"> State the various production processes followed in the baking industry State the different mixing methods used in the baking industry State the process of proofing 	
8	Produce Baked Products Theory Duration (hh:mm) 09:00 Practical Duration (hh:mm) 15:00 Corresponding NOS Code FIC/N5007	<ul style="list-style-type: none"> Demonstrate the process for mixing and preparing dough Demonstrate the process for fermenting and proofing dough Demonstrate the process for rolling, shaping, cutting and moulding biscuits and cookies Demonstrate the process for making mould batter for cakes Demonstrate the process for baking products in an oven Demonstrate the process for designing and developing specialty bakery products Identify if the final product meets the quality parameters State the process of cooling baked products State the process of packaging of baked products State the method of storing raw materials State the method of storing finished products 	Ovens (Diesel), Ovens (Gas), Baking sheet & Racks, Commercial Mixers, Wire whisksers, Refrigerator, Fryer, Baking Pan, Cooling racks, Bread slicer manual, Bread slicer mechanical, Cake decorative tools, Knives, Spatula, Utensils, Mixing bowl, Work table, Sinks, Measuring Cup & spoon, Thermometer, Timer, Digital Hygrometer, Lab equipment for testing, Lab chemicals for testing and glassware, Packing, wraps rolls, Packing wraps rolls, Aprons, Cleaning tools, Weighing Scale, Gas Burner (LPG), LPG cylinders, Heat resistant Gloves, Protective Gloves, Fire extinguishers, High speed exhausts, Masks – Head cover, mouth cover, ingredients and raw material as per recipe to be prepared
9	Post-Production Cleaning and Maintenance Theory Duration (hh:mm) 02:00 Practical Duration (hh:mm) 04:00 Corresponding NOS Code FIC/N5007	<ul style="list-style-type: none"> Demonstrate the process of cleaning the work area and machineries after production 	Permitted chemicals for cleaning the tools as per the organizational standards, tools used in baking process, Protective Gloves, sanitizers ,
10	Documentation and Record Keeping	<ul style="list-style-type: none"> State the need for documenting and maintaining records of baking ingredient, process, and finished products. 	Board/Chart paper/ Laptop and Projector, Trainer Handbook, Participant handbook, etc.

Sr. No.	Module	Key Learning Outcomes	Equipment Required
	Theory Duration (hh:mm) 01:00 Practical Duration (hh:mm) 02:30 Corresponding NOS Code FIC/N5008	<ul style="list-style-type: none"> State the method of documenting and recording the details of baking ingredients to final finished product 	
11	Food Safety, Hygiene and Sanitation Theory Duration (hh:mm) 03:00 Practical Duration (hh:mm) 05:00 Corresponding NOS Code FIC/N9001	<ul style="list-style-type: none"> State the importance of safety, hygiene and sanitation in food processing industry Follow the industry standards to maintain a safe and hygiene workplace Follow HACCP principles to eliminate food safety hazards in the process and products Follow the safety practices in the work area 	Board/Chart paper/ Laptop and Projector, Trainer Handbook, Participant handbook, etc., Sanitizers, Protective Gloves
12	Professional Skills Theory Duration (hh:mm) 04:00 Practical Duration (hh:mm) 04:30 Corresponding NOS Code Bridge Module	<ul style="list-style-type: none"> Undertake a self-assessment Identify personal strengths and weaknesses Plan and schedule the work order Prevent potential problems from occurring Resolve issues and problems using acquired knowledge Identify control measures to solve issues Complete assigned tasks with minimum supervision Assess your strengths and weakness Work on your strengths and weaknesses Improve your reading skills To state the importance of listening Assess your strengths and weakness Work on your strengths and weaknesses 	Board/Chart paper/ Laptop and Projector, Trainer Handbook, Participant handbook, etc.
13	IT Skills Theory Duration (hh:mm) 05:00	<ul style="list-style-type: none"> State the basic functionalities of the computer to perform day-to-day activities Use the computer keyboard effectively to type Use the MS-word effectively Use the keyboard effectively Use the spreadsheet application 	Board/Chart paper/ Laptop and Projector, Trainer Handbook, Participant handbook, etc.

Sr. No.	Module	Key Learning Outcomes	Equipment Required
	Practical Duration (hh:mm) 11:30 Corresponding NOS Code Bridge Module	effectively <ul style="list-style-type: none"> Use the computer to document day-to-day activities 	
14	Field Visits Theory Duration (hh:mm) 04:00 Practical Duration (hh:mm) 20:00 Corresponding NOS Code Bridge Module	<ul style="list-style-type: none"> Observe the factory location, layout, and safety aspects of bakery unit Observe the storage facilities for raw materials and finished products Observe the various machineries used in the bakery unit Observe the various machineries used in the baking industry Observe the cleaning methods and process followed to maintain machineries and tools Observe the baking ingredients used and their storage procedures Observe the packaging and storage processes of raw material and finished product Observe the post production cleaning and maintenance process followed in the industry 	All the tools and equipment listed above must be available at the site of the field visit
15	Revision Theory Duration (hh:mm) 02:00 Practical Duration (hh:mm) 00:00 Corresponding NOS Code Bridge Module	<ul style="list-style-type: none"> Revise the knowledge gained so far 	All the tools and equipment listed above must be available for revision
16	Evaluation Theory Duration (hh:mm) 10:00 Practical Duration (hh:mm) 14:00 Corresponding NOS Code Bridge Module	<ul style="list-style-type: none"> Assess the knowledge and skills acquired by the participants 	All the tools and equipment listed above must be available for evaluation
17	On-the-Job Training	<ul style="list-style-type: none"> Apply the skills and knowledge acquired in the training program in the field 	All the tools and equipment listed above must be available at the

Sr. No.	Module	Key Learning Outcomes	Equipment Required
	Theory Duration (hh:mm) 10:00 Practical Duration (hh:mm) 54:00 Corresponding NOS Code Bridge Module		site of the OJT
	Total Duration 240.00 Theory Duration 85.50 Practical Duration 154.50	Unique Equipment Required: Ovens; Baking sheet & Racks; Commercial Mixers; Wire whisks; Refrigerator; Refrigerator; Fryer; Baking Pan; Cooling racks; Bread slicer manual; Bread slicer mechanical; Cake decorative tools; Knives; Spatula; Utensils; Mixing bowl; Work table; Sinks; Measuring Cup & spoon; Thermometer; Timer; Digital Hygrometer; Lab equipment for testing; Lab chemicals for testing and glassware, Packing, wraps rolls; Packing wraps rolls; Aprons; Cleaning tools; Weighing Scale; Gas Burner (LPG); LPG cylinders; Heat resistant Gloves; Protective Gloves; Fire extinguishers; High speed exhausts; Masks -- Head cover, mouth cover	

Grand Total Course Duration: 240 Hours, 0 Minutes

(This syllabus/ curriculum has been approved by SSC: Food Industry Capacity and Skill Initiative (FICSI))

Trainer Prerequisites for Job role: “Craft Baker” mapped to Qualification Pack: “FIC/Q5002”

Sr. No.	Area	Details
1	Description	To deliver accredited training service, mapping to the curriculum detailed above, in accordance with the Qualification Pack “FIC/Q5002”.
2	Personal Attributes	Aptitude for conducting training, and pre/ post work to ensure competent, employable candidates at the end of the training. Strong communication skills, interpersonal skills, ability to work as part of a team; a passion for quality and for developing others; well-organised and focused, eager to learn and keep oneself updated with the latest in the mentioned field.
3	Minimum Educational Qualifications	<ul style="list-style-type: none"> • Diploma in Food Tech or Food Engineering with 4 years of hand on experience in a bakery industry or • B.Sc/B.Tech/BE in Food Technology or Food Engineering with 2-3 years of hand on experience in a bakery industry or • M.Sc/M.Tech/ME in Food Technology or Food Engineering with 1-2 years of hand on experience in a bakery industry.
4a	Domain Certification	Certified for Job Role: “Craft Baker” mapped to QP: “FIC/Q5002”Version 1.0. Minimum accepted score is 80%,as per FICSI guidelines.
4b	Platform Certification	Recommended that the Trainer is certified for the Job Role: “Trainer”, mapped to the Qualification Pack: “SSC/Q1402”. Minimum accepted score is 80%,as per FICSI guidelines.
5	Experience	<ul style="list-style-type: none"> • Diploma in Food Tech or Food Engineering with 4 years of hand on experience in a bakery industry or • B.Sc/B.Tech/BE in Food Technology or Food Engineering with 2-3 years of hand on experience in a bakery industry or • M.Sc/M.Tech/ME in Food Technology or Food Engineering with 1-2 years of hand on experience in a bakery industry.

Annexure: Assessment Criteria

Assessment Criteria for Craft Baker	
Job Role	Craft Baker
Qualification Pack	FIC/Q5002, Version 1.0
Sector Skill Council	Food Processing

Sr. No.	Guidelines for Assessment
1	Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Skills Practical for each PC.
2	The assessment for the theory part will be based on knowledge bank of questions created by the SSC
3	Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training center (as per assessment criteria below)
4	Individual assessment agencies will create unique evaluation for skill practical for every student at each examination/training center based on this criteria
5	To pass the Qualification Pack, every trainee should score a minimum of 70% (overall) in every QP
6	In case of successfully passing only certain number of NOS's, the trainee is eligible to take subsequent assessment on the balance NOS's to pass the Qualification Pack

Sr. No.	NOS No.	NOS Name	Total Marks	Marks Allocation: Skills	Marks Allocation: Knowledge
1	FIC/N5005	Prepare and maintain work area and machineries for producing baked products in artisan bakeries and patisseries	100	65	35
2	FIC/N5006	Prepare for production of baked products in artisan bakeries and patisseries	100	65	35
3	FIC/N5007	Produce baked products in artisan bakeries and patisseries	100	65	35
4	FIC/N5008	Complete documentation and record keeping related to production of baked products in artisan bakeries and patisseries	100	40	60
5	FIC/N9001	Food safety, hygiene and sanitation for processing food products	100	65	35
Total:			500	300	200
Percentage Weightage:			100	60%	40%
Minimum Pass% to qualify:					

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