



Model Curriculum

QP Name: Fish and sea food processing technician

QP Code: FIC/Q4001

QP Version: 1.0

NSQF Level: 3

Model Curriculum Version: 1.0

Food Industry Capacity and Skill Initiative (FICSI)
Shriram Bhartiya Kala Kendra (3rd Floor)
Copernicus Marg, New Delhi 110001
Phone: 9711260230

Table of Contents

Training Parameters.....	3
Program Overview	4
This section summarizes the end objectives of the program along with its duration.....	4
Training Outcomes.....	4
Compulsory Modules	4
Module Details.....	6
Module 1: Introduction to the training program and overview of food processing industry	6
<i>Bridge Module</i>	6
Module 2: Food processing Industry	7
Module 3: Prepare work area and equipment for fish and sea food processing	8
Module 4: Fish and sea food processing.....	9
Module 5: Organizational standards and norms	9
Module 6: Professional Skills	10
Module 7: Core/Generic Skills	11
Module 8: Prepare for execution of fish and sea food processing.....	12
Module 9: Food Microbiology.....	14
Module 10: Execution of fish and sea food processing	15
Module 11: Conduct field visits	16
Module 12: Document and record information	17
Module 13: IT orientation.....	18
Module 14: Food safety, hygiene and sanitation for processing fish and sea food	19
Module 15: Revision	20
Module 16: Evaluation.....	21
Module 17 : Employability and Entrepreneurship skills	22
Annexure.....	24
Trainer Requirements	24
Assessor Requirements.....	25
Assessment Strategy	26
Glossary.....	27
Acronyms and Abbreviations.....	28

Training Parameters

Sector	Food Processing
Sub-Sector	Fish and Sea Food
Occupation	Processing
Country	India
NSQF Level	3
Aligned to NCO/ISCO/ISIC Code	NCO-2004/7411.90
Minimum Educational Qualification and Experience	Class 5th passed and 2 years of relevant experience
Pre-Requisite License or Training	<ol style="list-style-type: none"> 1. Food standards 2. Food handling, packaging and storage techniques 3. Raw material, quality control and waste management 4. Refrigeration and cold storage 5. GMP 6. HACCP 7. QMS 8. Computer basics and ERP system followed by the organization 9. Training in Food Safety Standards and Regulations (as per FSSAI) (Mandatory)
Minimum Job Entry Age	18 years
Last Reviewed On	31-05-2021
Next Review Date	31-05-2024
NSQC Approval Date	22-09-2015
QP Version	1.0
Model Curriculum Creation Date	31-12-2015
Model Curriculum Valid Up to Date	31-05-2024
Model Curriculum Version	1.0
Minimum Duration of the Course	280 Hours
Maximum Duration of the Course	280 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:

- Process all types of fish and seafood manually or mechanically to achieve the desired quality as set by the organization
- Operate the machineries/equipment for processing fish and seafood
- Plan, organize, and prioritize production as per schedule
- Follow and maintain food safety and hygiene in the work environment

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
Introduction to the sector and the job	46:00 Hours	47:00 Hours	00:00 Hours	00:00 Hours	93:00 Hours
Module 1: Introduction to the training program and overview of food processing industry	01:00 Hours	00:00 Hours	00:00 Hours	00:00 Hours	01:00 Hours
Module 2: Food processing industry	02:00 Hours	00:00 Hours	00:00 Hours	00:00 Hours	02:00 Hours
Module 13: IT Orientation	06:00 Hours	10:00 Hours	00:00 Hours	00:00 Hours	16:00 Hours
Module 15: Revision	04:00 Hours	10:00 Hours	00:00 Hours	00:00 Hours	14:00 Hours
Module 16: Evaluation	05:00 Hours	15:00 Hours	00:00 Hours	00:00 Hours	20:00 Hours
Module 17: Employability and Entrepreneurship skills	28:00 Hours	12:00 Hours	00:00 Hours	00:00 Hours	40:00 Hours
FIC/N4001 Prepare and maintain work area and machineries for processing fish and sea food NOS Version No.: 1.0 NSQF Level: 3	30:00 Hours	18:00 Hours	00:00 Hours	00:00 Hours	48:00 Hours
Module 3: Prepare work area and equipment for fish and sea food processing	12:00 Hours	11:30 Hours	00:00 Hours	00:00 Hours	23:30 Hours

Module 4: Fish and sea food processing	05:00 Hours	00:00 Hours	00:00 Hours	00:00 Hours	05:00 Hours
Module 5: Organisational standards and norms	06:00 Hours	00:00 Hours	00:00 Hours	00:00 Hours	06:00 Hours
Module 6: Professional Skills	04:00 Hours	06:30 Hours	00:00 Hours	00:00 Hours	10:30 Hours
Module 7: Core/Generic skills	03:00 Hours	00:00 Hours	00:00 Hours	00:00 Hours	03:00 Hours
FIC/N4002 Prepare for execution of fish and sea food processing NOS Version No.: 1.0 NSQF Level: 3	18:00 Hours	30:00 Hours	00:00 Hours	00:00 Hours	48:00 Hours
Module 8: Prepare for execution of fish and sea food processing	12:00 Hours	30:00 Hours	00:00 Hours	00:00 Hours	42:00 Hours
Module 9: Food Microbiology	06:00 Hours	00:00 Hours	00:00 Hours	00:00 Hours	06:00 Hours
FIC/N4003 Execution of fish and sea food processing NOS Version No.: 1.0 NSQF Level: 3	19:00 Hours	53:00 Hours	00:00 Hours	00:00 Hours	72:00 Hours
Module 10: Execution of fish and sea food processing	08:00 Hours	35:00 Hours	00:00 Hours	00:00 Hours	43:00 Hours
Module 11: Conduct field visits	11:00 Hours	18:00 Hours	00:00 Hours	00:00 Hours	29:00 Hours
FIC/N4004 Complete documentation and record keeping related to processing of fish and sea food NOS Version No.: 1.0 NSQF Level: 3	03:00 Hours	11:00 Hours	00:00 Hours	00:00 Hours	14:00 Hours
Module 12: Document and record information	03:00 Hours	11:00 Hours	00:00 Hours	00:00 Hours	14:00 Hours
FIC/N9001 Food safety, hygiene and sanitation for processing food products NOS Version No.: 1.0 NSQF Level: 3	04:30 Hours	10:30 Hours	00:00 Hours	00:00 Hours	15:00 Hours
Module 14: Food safety, hygiene and sanitation for processing fish and sea food	04:30 Hours	10:30 Hours	00:00 Hours	00:00 Hours	15:00 Hours
Total Duration	120:30 Hours	159:30 Hours	00:00 Hours	00:00 Hours	280:00 Hours

Module Details

Module 1: Introduction to the training program and overview of food processing industry

Bridge Module

Terminal Outcomes:

- Discuss the opportunities available for fish and seafood technicians in food processing industry

Duration: 01:00	Duration: 00:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Introduce each other and build rapport with fellow participants and the trainer. • Discuss the future trends and career growth opportunities available to fish and seafood processing technicians. • List the sequence of tasks performed. 	
Classroom Aids:	
White/Black board/ Chart paper, Markers/ computer and projector	
Tools, Equipment and Other Requirements	
Nil	

Module 2: Food processing Industry

Bridge Module

Terminal Outcomes:

- Discuss the sub-sectors of food processing Industry

Duration: 02:00	Duration: 00:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • List the various sub-sectors of food processing industry. • Define food processing. 	
Classroom Aids:	
White/Black board/ Chart paper, Markers/ computer and projector, Trainer’s Guide, Student Handbook	
Tools, Equipment and Other Requirements	
NIL	

Module 3: Prepare work area and equipment for fish and sea food processing

Mapped to FIC/N4001,FIC/N4002,FIC/N4003,FIC/N9001, v1.0

Terminal Outcomes:

- Discuss the tasks to be performed to prepare for fish and sea food processing
- State the importance of maintaining tools and equipment effectively

Duration: 12:00	Duration: 11:30
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • List the different equipment used in the fish and seafood processing. • List the materials and equipment used in cleaning and maintenance of the work area and machineries . • Explain the cleaning processes used to clean the work area. • Describe how to dispose waste as per organizational standards. 	<ul style="list-style-type: none"> • Show how to clean the work area and equipment to prepare for production. • Display the procedure to rectify faults and minor repairs in process machinery. • Show how to maintain the tools and machines utilised for production. • Demonstrate the use of different equipment used in fish and seafood processing.
Classroom Aids:	
Computer, Projection Equipment, PowerPoint Presentation and software, Facilitator’s Guide, Participant’s Handbook	
Tools, Equipment and Other Requirements	
Filtering machine, Scaling machine, Shelling machine, Slitting machine, Grounding machine, Opening machine, Thermoformers, Moulders, Heat sealers, Can making equipment, Can closers/ sealers, Seam testers, Fillers of all type, Cutting / slitting / trimming equipment, Typing / sieving/ stappling equipment, Closing / sealing equip, Form / fill/ seal equip, Cappers/ crumpers/ hooders, Wrappers, Cartoners, Multipackers, Bundlers, Shrink wrappers and tunnels, Labellers, Coding equipment, Check weighers, Metal detection equipment, Level checking equipment, Code/ lable inspecting equipment, Palletisers, Bottle spotters, Aligners, Container cleaning/ washing/ drying systems, Accumulator/ collectors	

Module 4: Fish and sea food processing

Mapped to FIC/N4001, v1.0

Terminal Outcomes:

- Discuss about fish and sea food processing

Duration: 05:00	Duration: 00:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Describe the fisheries industry in India. • List the various types of fish and seafood products. • Explain the methods of processing fish and seafood. • Explain the different methods of fish and seafood processing. 	
Classroom Aids:	
White/Black board/ Chart paper, Markers/ computer and projector, Trainer’s Guide, Student Handbook	
Tools, Equipment and Other Requirements	
NIL	

Module 5: Organizational standards and norms

Mapped to FIC/N2003 v1.0

Terminal Outcomes:

- Discuss the roles and responsibilities of the individual in the job
- Describe importance of personal hygiene and sanitation

Duration: 06:00	Duration: 00:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Discuss the roles and responsibilities of the individual • Describe how to conduct yourself at the workplace • Discuss the personal hygiene and sanitation guidelines • Describe the food safety hygiene standards to follow in a work environment 	
Classroom Aids:	
Computer, Projection Equipment, PowerPoint Presentation and software, Facilitator’s Guide, Participant’s Handbook	

Module 6: Professional Skills

Mapped to FIC/N4001, v1.0

Terminal Outcomes:

- Discuss the attributes of desirable professional behaviour
- Demonstrate the standard measures undertaken for working effectively

Duration: 04:00	Duration: 06:30
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Identify personal strengths and weaknesses. • Discuss the importance of workorder in the process. • State the importance of decision making in the job. • State the importance of communicating effectively. 	<ul style="list-style-type: none"> • Apply standard practice to undertake a self-assessment test for identifying strengths and weaknesses. • Plan and prioritise tasks effectively to ensure timely completion. • Demonstrate the ways to analyse situations for identifying problems and making sound decision promptly.
Classroom Aids:	
Computer, Projection Equipment, PowerPoint Presentation and software, Facilitator's Guide, Participant's Handbook	
Tools, Equipment and Other Requirements	
Gloves, hair net, shoe cover, soap dispenser, hand sanitizer, ear plugs, masks, aprons/lab coats eye protection, hard hats, gloves, rubber boots, etc.	

Module 7: Core/Generic Skills

Bridge Module

Terminal Outcomes:

- Discuss the attributes of desirable professional behaviour

Duration: 03:00	Duration: 00:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Discuss task lists, schedules and activities with the supervisor • Describe effective communication with the team members • Question the supervisor in order to understand the nature of the problem and to clarify queries • Listen attentively and comprehend the information given by the speaker • Communicate clearly with the supervisor and cross department teams on the issues faced during process 	
Classroom Aids:	
Board/Chart paper/ Laptop and Projector, Trainer Handbook, Participant handbook, etc.	
Tools, Equipment and Other Requirements	
NIL	

Module 8: Prepare for execution of fish and sea food processing

Mapped to FIC/N4002, FIC/N4003, FIC/N9001, v1.0

Terminal Outcomes:

- List the tasks to be performed to prepare for fish and sea food processing
- Demonstrate the techniques to be followed to inspect and prepare the raw materials as per desirable standards

Duration: 12:00	Duration: 30:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • List the different varieties of fish and seafood that are processed. • Explain the quality parameters for raw materials to be processed. • Describe the quality assessment methods based on the physical parameters. • Describe the various units of measurement used in the food processing industry. • List the types and categories of packaging materials used for processed fish and seafood. • Discuss the laws and regulations related to product packaging and labeling. • Discuss the storage requirements for raw materials and finished products. • Discuss the quality of food and intake measures to prevent spoilage. • Explain stock rotation based on FIFO/FEFO. • Describe the refrigeration and cold storage facility used for fish and seafood processing. • Describe the storage conditions for all varieties of fish and seafood. • Discuss the documenting procedures for packaging and storing. • Plan the production schedule as per organizational standards and instructions. • Organize for raw material, packaging 	<ul style="list-style-type: none"> • Calculate the requirement of raw materials for desired quantity of finished product processing industry • Calculate the requirement of raw materials for desired quantity of finished product • Support in planning production sequence. • Demonstrate the storage procedures for raw materials and processed food.

materials, manpower, equipment, and machineries for the scheduled production	
Classroom Aids:	
Computer, Projection Equipment, PowerPoint Presentation and software, Facilitator's Guide, Participant's Handbook	
Tools, Equipment and Other Requirements	
Filtering machine, Scaling machine, Shelling machine, Slitting machine, Grounding machine, Opening machine, Thermoformers, Moulders, Heat sealers, Can making equipment, Can closers/ sealers, Seam testers, Fillers of all type, Cutting / slitting / trimming equipment, Typing / sieving/ stapling equipment, Closing / sealing equip, Form / fill/ seal equip, Cappers/ crumpers / hooders, Wrappers, Cartoners, Multipackers, Bundlers, Shrink wrappers and tunnels, Labellers, Coding equipment, weighing scale, Metal detection equipment, Level checking equipment, Code/ label inspecting equipment, Palletisers, Bottle spotters, Aligners, Container cleaning/ washing/ drying systems, Accumulator/ collectors, refrigerator	

Module 9: Food Microbiology

Mapped to FIC/N4002, v1.0

Terminal Outcomes:

- Describe food microbiology and its use in fish and sea food processing
- Demonstrate the techniques of food preservation

Duration: 06:00	Duration: 00:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • List the types of food microbes. • Explain the causes for food spoilage. • Describe the process for food spoilage. • Explain the criteria to check food spoilage. • Discuss the need for food preservation. • Discuss different types of food preservation processes 	
Classroom Aids:	
White/Black board/ Chart paper, Markers/ computer and projector, Trainer's guide, student handbook	
Tools, Equipment and Other Requirements	
Nil	

Module 10: Execution of fish and sea food processing

Mapped to FIC/N4003, v1.0

Terminal Outcomes:

- Discuss the stages involved in execution of fish and sea food processing
- Demonstrate the tasks to be performed for fish and sea food processing

Duration: 08:00	Duration: 35:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Describe the process of receiving and handling raw materials. • Explain the process of grading and sorting varieties of fish and seafood. • Describe the methods of preprocessing fish and seafood • Explain the methods of processing fish and seafood 	<ul style="list-style-type: none"> • Demonstrate the process of cleaning the work area and machineries after production
Classroom Aids:	
Computer, Projection Equipment, PowerPoint Presentation and software, Facilitator's Guide, Participant's Handbook	
Tools, Equipment and Other Requirements	
White/Black board/ Chart paper, Markers/ computer and projector, Trainer Guide, Student Handbook, Filtering machine, Scaling machine, Shelling machine, Grounding machine, Opening machine, Thermoformers, Moulders, Heat sealers, Can making equipment, Can closers/ sealers, Seam testers, Fillers of all type, Cutting / slitting / trimming equipment, Typing / sieving/ stappling equipment, Closing / sealing equipment, Form / fill/ seal equip, Cappers/ crumpers/ hooders, Wrappers, Cartoners, Multipackers, Bundlers, Shrink wrappers and tunnels, Labellers, Coding equipments, Check weighers, Metal detection equipment, Level checking equipment, Code/ label inspecting equipment, Printing equipment, Palletisers, Bottle spotters, Aligners, Container cleaning/ washing/ drying systems, Accumulator/ collectors, Unloaders, stackers, Feeding/ orienting equipment, various types of fish and sea food	

Module 11: Conduct field visits

Bridge module

Terminal Outcomes:

- Discuss the importance of field visit

Duration: 11:00	Duration: 18:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Explain the storage facilities for raw materials and finished products. • List the various machineries used in process. • List the raw materials used and their storage procedures. • Discuss the packaging and storage processes of raw material and finished product. 	<ul style="list-style-type: none"> • Select the factory location, layout and safety aspects of food processing. • Demonstrate the cleaning methods and processes followed to maintain the process machineries and tools. • Perform the post-production cleaning and maintenance process followed in the industry.
Classroom Aids:	
Computer, Projection Equipment, PowerPoint Presentation and software, Facilitator's Guide, Participant's Handbook	
Tools, Equipment and Other Requirements	
Food safety manual, logbooks.	

Module 12: Document and record information

Mapped to FIC/N4004, v1.0

Terminal Outcomes:

- Discuss the importance of recording information in production
- Demonstrate the standard practice followed to record production information

Duration: 03:00	Duration: 11:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Discuss the importance of documentation and maintaining records during the entire work process. • List the information to be recorded as per the production work. 	<ul style="list-style-type: none"> • Document necessary information such as production plan, process parameters, and finished products. • Prepare records to record information as per production and organisational requirements.
Classroom Aids:	
Computer, Projection Equipment, PowerPoint Presentation and software, Facilitator's Guide, Participant's Handbook	
Tools, Equipment and Other Requirements	
Food safety manual, logbooks.	

Module 13: IT orientation

Bridge Module

Terminal Outcomes:

- List the parts of a computer
- Demonstrate the effective use of data recording applications at the workplace

Duration: 06:00	Duration: 10:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • List the various parts of a computer. • Describe the functions of different computer devices. • List the various applications used in recording information. 	<ul style="list-style-type: none"> • Demonstrate the standard techniques used to operate a computer. • Show how to use an ERP software for recording information. • Demonstrate the effective use of applications such as word processor and spreadsheets.
Classroom Aids:	
Computer, Projection Equipment, PowerPoint Presentation and software, Facilitator's Guide, Participant's Handbook	
Tools, Equipment and Other Requirements	
Computer/laptop.	

Module 14: Food safety, hygiene and sanitation for processing fish and sea food

Mapped to FIC/N9001 v1.0

Terminal Outcomes:

- Discuss the importance of health and safety at the workplace
- Demonstrate the tasks to be performed for ensuring health and safety at the workplace

Duration: 04:30	Duration: 10:30
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Discuss the importance of safety, hygiene and sanitation in the fish and sea food processing industry. • Discuss the relevant HACCP principles to be followed in the fish and sea food processing industry. 	<ul style="list-style-type: none"> • Demonstrate the steps to be performed to maintain a safe and hygiene workplace. • Demonstrate the steps to be performed to implement HACCP practices for ensuring food safety. • Roleplay a situation depicting the safety practices to be followed at the workplace.
Classroom Aids:	
Computer, Projection Equipment, PowerPoint Presentation and software, Facilitator’s Guide, Participant’s Handbook	
Tools, Equipment and Other Requirements	
Protective gloves, head caps, aprons, safety goggles, safety boots, mouth covers, sanitizer, food safety manual ,logbooks etc.	

Module 15: Revision

Bridge Module

Terminal Outcomes:

- Revise all that is discussed in training

Duration: 04:00	Duration: 10:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Recall the knowledge gained so far 	<ul style="list-style-type: none"> • Demonstrate learning as per trainer's instructions.
Classroom Aids:	
All the tools and equipment listed above must be available at the time of revision	
Tools, Equipment and Other Requirements	
NIL	

Module 16: Evaluation

Bridge Module

Terminal Outcomes:

- Discuss the importance of recording information in ice cream processing

Duration: 05:00	Duration: 15:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Explain the elements of assessment of skills acquired. 	<ul style="list-style-type: none"> • Assess the knowledge and skills acquired by the participants.
Classroom Aids:	
All the tools and equipment listed above must be available for evaluation	
Tools, Equipment and Other Requirements	
NIL	

Module 17 : Employability and Entrepreneurship skills

Terminal Outcomes:

- Describe the traits of individual at workplace
- Demonstrate apply employability and entrepreneurship skills at workplace

Duration: 28:00	Duration: 12:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • 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. • List the characteristics of innovative individuals • List the levels of Maslow Hierarchy of needs • List the traits of effective team • Discuss tips for stress management • Discuss the importance of good work ethics • Discuss how to manage an enterprise • 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 types and importance of e-commerce in promoting businesses. • List the various types of online banking services being used widely. • Discuss the procedure to apply for bank finances • 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. • Understand the make in India campaign • Discuss the importance of Swachh Bharat Abhiyan • Understand the importance of 	<ul style="list-style-type: none"> • 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. • Describe how market research is carried out • Role play the characteristics of an effective entrepreneur and leader • Demonstrate on how to identify new business opportunities • 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.

<p>entrepreneurship</p> <ul style="list-style-type: none"> • Describe the traits of successful entrepreneur • List the types of enterprises • Understand the importance of effective speaking and listening • Discuss the importance of problem solving • Discuss how to deal with failures • Describe the core keys of marketing • Discuss ways to manage risks at workplace 	
Classroom Aids:	
Computer, Projection Equipment, PowerPoint Presentation and software, Facilitator's Guide, Participant's Handbook.	
Tools, Equipment and Other Requirements	
Nil	

Annexure

Trainer Requirements

Trainer Prerequisites						
Minimum Educational Qualification <i><Select the minimum educational requirements, such as 12th Pass, Graduate or NSQF certified.></i>	Specialization <i><Specify the areas of specialization that are desirable.></i>	Relevant Industry Experience		Training Experience		Remarks
		Years	Specialization	Years	Specialization	
B. Sc./B. Tech/BE	Fisheries Science or Food Technology or Food Engineering	2	Fish Processing Unit (marine/in-land)	1	Training of fish and sea food processing technicians	
M. Sc./M. Tech/ME	Fisheries Science or Fish Nutrition and Feed Technology or Food Technology or Food Engineering	1	Fish Processing Unit (marine/in-land)	1	Training of fish and sea food processing technicians	

Trainer Certification	
Domain Certification	Platform Certification
Certified for Job Role: “Fish and Sea Food Processing Technician” mapped to QP: “FIC/Q4001, 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 <i><Select the minimum educational requirements, such as 12th Pass, Graduate or NSQF certified.></i>	Specialization <i><Specify the areas of specialization that are desirable.></i>	Relevant Industry Experience		Training/Assessment Experience		Remarks
		Years	Specialization	Years	Specialization	
B. Sc./B. Tech/BE	Fisheries Science or Food Technology or Food Engineering	2	Fish Processing Unit (marine/in-land)	1	Assessment of fish and sea food processing technicians	
M. Sc./M. Tech/ME	Fisheries Science or Fish Nutrition and Feed Technology or Food Technology or Food Engineering	1	Fish Processing Unit (marine/in-land)	1	Assessment of fish and sea food processing technicians	

Assessor Certification	
Domain Certification	Platform Certification
Certified for Job Role: “Fish and Sea Food Processing Technician” mapped to QP: “FIC/Q4001, 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 behavioural aspects as regards the job role and the specific task at hand.

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
HACCP	Hazard Analysis and Critical Control Points
GMP	Good Manufacturing Practices
GHP	Good Hygiene Practices