





Model Curriculum

QP Name: Assistant Electrician- Food manufacturing facility

QP Code: FIC/Q9504

QP Version: 1.0

NSQF Level: 3

Model Curriculum Version: 1.0

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Table of Contents

Training Parameters
Program Overview
Training Outcomes4
Compulsory Modules4
Module Details
Module 1: Introduction to food processing sector and the job role of an Electrician - Food Processing Facility
Module 2: Installation of electrical equipment7
Module 3: Maintenance of electrical equipment9
Module 4: Ensuring food safety and personal hygiene11
Module 5: Managing accidents and emergencies13
Module 6: Working effectively in an organization15
Module 7: Material Conservation17
Module 8: Energy/electricity conservation18
Module 9: Waste management/recycling19
Annexure
Trainer Requirements
Assessor Requirements23
Assessment Strategy24
Glossary24
Acronyms and Abbreviations25





Training Parameters

Sector	Food Processing
Sub-Sector	Generic
Occupation	Utilities and Maintenance
Country	India
NSQF Level	3
Aligned to NCO/ISCO/ISIC Code	NCO-2015/7241.20
Minimum Educational Qualification and Experience	 Class 12th passed in any stream Class 10th passed and 2 years course in relevant stream Class 10th passed and 2 years of relevant experience Class 10th Pass and 2 years of ITI in relevant field
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	280 Hours + 40 OJT
Maximum Duration of the Course	280 Hours + 40 OJT





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 installation and maintenance of an electrical equipment at the food processing workplace
- Perform tasks for the installation of an electrical equipment
- Apply standard work practices for the maintenance of an electrical equipment
- Apply necessary health and safety practices to ensure food safety and personal hygiene
- Work with various organisational departments 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 (Recommende d)	Total Duration
Bridge Module	32:00 Hours	12:00 Hours	00:00 Hours	00:00 Hours	44:00 Hours
Module 1: Introduction to food processing sector and the job of an Electrician - Food Processing Facility	04:00 Hours	00:00 Hours	00:00 Hours	00:00 Hours	04:00 Hours
Module 10: Employability and Entrepreneurship Skills	28:00 Hours	12:00 Hours	00:00 Hours	00:00 Hours	40:00 Hours
FIC/N9507: Install electrical utilities in a food processing facility NOS Version No.: 1.0 NSQF Level: 3	32:00 Hours	64:00 Hours	00:00 Hours	00:00 Hours	96:00 Hours
Module 2: Installation of electrical equipment	32:00 Hours	64:00 Hours	00:00 Hours	00:00 Hours	96:00 Hours
FIC/N9508: Carry out preventive maintenance of electrical equipment installed in a food processing facility NOS Version No.: 1.0 NSQF Level: 3	24:00 Hours	40:00 Hours	00:00 Hours	00:00 Hours	64:00 Hours
Module 3: Maintenance of electrical equipment	24:00 Hours	40:00 Hours	00:00 Hours	00:00 Hours	64:00 Hours

4 Electrician - Food Processing Facility





FIC/N9901: Implement health and safety practices at the workplace NOS Version No.: 1.0 NSQF Level: 3	08:00 Hours	16:00 Hours	00:00 Hours	00:00 Hours	24:00 Hours
Module 4: Ensuring food safety and personal hygiene	04:00 Hours	08:00 Hours	00:00 Hours	00:00 Hours	12:00 Hours
Module 5: Managing accidents and emergencies	04:00 Hours	08:00 Hours	00:00 Hours	00:00 Hours	12:00 Hours
FIC/N9902: Work effectively in an organization NOS Version No.: 1.0 NSQF Level: 3	08:00 Hours	08:00 Hours	00:00 Hours	00:00 Hours	16:00 Hours
Module 6: Working effectively in an organisation	08:00 Hours	08:00 Hours	00:00 Hours	00:00 Hours	16:00 Hours
SGJ/N1702: Optimize resource utilization at workplace NOS Version No.: 1.0 NSQF Level: 3	12:00 Hours	24:00 Hours	00:00 Hours	00:00 Hours	36:00 Hours
Module 7: Material conservation	04:00 Hours	08:00 Hours	00:00 Hours	00:00 Hours	12:00 Hours
Module 8: Energy/ electricity conservation	04:00 Hours	08:00 Hours	00:00 Hours	00:00 Hours	12:00 Hours
Module 9: Waste management/recycling	04:00 Hours	08:00 Hours	00:00 Hours	00:00 Hours	12:00 Hours
Total Duration	116 Hours	164 Hours	00:00 Hours	00:00 Hours	280 Hours





Module Details

Module 1: Introduction to food processing sector and the job role of an 'Electrician - Food Processing Facility' *Bridge Module*

- Discuss about future scope and opportunities available to electricians in food processing industry
- Discuss the role and responsibilities of an electrician in a food processing workplace

Duration: 04:00	Duration: 00:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
• Discuss the future trends and career growth	
opportunities available to the Electrician.	
• Summarise the key role and responsibilities	
of 'Electrician - Food Processing Facility'.	
• List the various terminologies used in the	
installation and maintenance of electrical	
facilities in a food processing industry.	
• Discuss the organisational policies to be	
followed pertaining to the delivery	
standards, health, safety and hazard	
handling procedures, integrity, dress code,	
etc.	
• State the importance of planning before starting the work.	
• List the sequence of operations to be performed as required in the job.	
Classroom Aids:	
Computer, Projection Equipment, PowerPoint Pre	esentation and software, Facilitator's Guide,
Participant's Handbook.	
Tools, Equipment and Other Requirements	
Nil	





Module 2: Installation of Electrical Equipment Mapped to FIC/N9507, v1.0

- List the pre-requisites for the installation of electrical equipment
- Perform various tasks to install the electrical equipment effectively

Theory – Key Learning Outcomes	
	Practical – Key Learning Outcomes
 Discuss standards and procedures followed in the organization pertaining installation, testing, reporting and documentation in a food processing environment. Elucidate common electrical terminologies, basic concepts of electricity, characteristics of various types of power and energy management systems utilised in food processing industry. List the information to be obtained from the supervisor required for ensuring the effective installation of electrical equipment. State the importance of layouts, blueprints, etc. and site inspections to identify the location and specifications of electrical utilities in a food processing utility. List the factors responsible for identifying the type of electrical installation to be carried out. List the various types of power tools, gauges, measuring instruments and equipment required for installation of electrical equipment. Discuss the technique used to check and calibrate the tools, gauges, measuring instruments and equipment used in electrical installations in a food processing workplace. Discuss the safe practices to be followed for dismantling and assembling the equipment post completion of installation tasks. Discuss the various types of equipment faults, related causes and techniques used for their identification. 	 Practical - Key Learning Outcomes Apply appropriate techniques to check the calibration of tools, gauges and measuring instruments before use. Roleplay a situation on how to obtain approval from the concerned person for carrying out installation work. Demonstrate the procedure to be followed to install the electrical systems, controls and components of equipment. Demonstrate the steps performed to install and connect the ground leads and power cables of equipment to the mains supply and lighting systems, intercom systems, etc. with the main station effectively. Employ appropriate techniques to test the continuity of circuits in electrical wiring, equipment and fixtures. Show how to inspect the working condition of electrical supplies. Show how to connect the wires to the designated terminals, tighten the switches and assemble the equipment while ensuring required safety. Perform various steps for conducting trials and running few cycles of the equipment on increased duty conditions to check for abnormalities and examine the functioning. Show how to adjust the equipment settings and controls to ensure desired functioning of the electrical equipment. Demonstrate the techniques followed to implement corrective measures after installation is complete. Show how to calibrate the tools, gauges, measuring instruments and equipment





 Explain the corrective actions that are taken to address equipment faults effectively. Discuss the reasons and impact of inefficiencies observed in the electrical equipment. Discuss the necessary safety procedures to be followed for dealing with workplace hazards and avoiding accidents. List the types of documents and records to be prepared and information to be recorded pertaining to installation work done. Describe the standard practices used for the disposal of waste from the workplace appropriately. State the importance of ensuring a clean workplace. 	 Employ appropriate practices to clean and store the power tools, equipment and process auxiliaries after completion of work. Prepare sample records for recording information such as history sheets, equipment performance reviews, closure of complaints, etc. 			
Classroom Aids:				
Computer, Projection Equipment, PowerPoint Presentation and software, Facilitator's Guide,				
Participant's Handbook				
Tools, Equipment and Other Requirements				
Cleaning brush, lever, self-contained breathing apparatus, cleaning agents, cleaning chemicals,				
filters, tools, equipment, fixtures, accessories, testing apparatus, effluent water samples, gauges,				

logbooks, gloves and sample records.





Module 3: Maintenance of electrical equipment Mapped to FIC/N9508, v1.0

- Identify the requirements for maintaining the electrical equipment
- Perform various tasks for carrying out electrical equipment maintenance

Duration: 24:00	Duration: 40:00
Гheory – Key Learning Outcomes	Practical – Key Learning Outcomes
 Discuss the standards, policies and procedures followed in the organization for maintaining the electrical equipment in a food processing industry. State the importance of equipment layout, technical drawings, maintenance schedule and checklist for carrying out equipment maintenance. List the machine specifications and elements to be examined to ensure desired functioning of the electrical equipment. Describe the information to be obtained from various sources for planning the maintenance tasks. List the various tools, consumables and spare parts required during maintenance. Explain the safety precautions to be followed to inspect the electrical equipment for possible defects and faults. State the importance of fixing a lockout or tagout device to the equipment. List the steps to be performed for dismantling and assembling the equipment safely. Discuss the safe practices to be followed for using tools, equipment, gauges, meters, testing equipment etc. utilised in the maintenance process. Discuss the necessary precautions to be undertaken for handling hazards and preventing accidents during electrical equipment maintenance. 	 Roleplay a situation on how to inform relevant departments about the type of maintenance work to be done and obtain approvals from designated personnel before starting the maintenance job. Demonstrate the standard work practice to clean the work area before carrying out maintenance work. Show how to shut down and disconnect all primary and secondary energy sources safely. Show how to inspect the electrical equipment for possible defects and faults. Show how to attach a lockout or tagout device to the equipment. Demonstrate the procedure to be followed for dismantling the equipment and disconnecting the faulty parts. Employ appropriate practices to install the new component/s in the equipment appropriately. Show how to inspect the equipment and disconnecting the faulty parts. Employ appropriate ways to troubleshoot and repair the electrical equipment. Roleplay a situation on how to communicate issues (such as equipment malfunctions, complex maintenance) beyond own scope to the concerned personnel effectively. Demonstrate the procedure to be followed for assembling the equipment safely.





- List the types of documents to be prepared pertaining to the maintenance tasks performed.
- List the information to be recorded during the maintenance job.
- Describe the methods used for safe disposal of waste material from the food processing workplace after maintenance work is complete.
- Show how to check the equipment to ensure it is working as per desired standards.
- Show how to dispose electrical components safely as per organisational and environmental guidelines.
- Prepare a sample report consisting of the malfunctions/repairs observed and maintenance work done.

Classroom Aids:

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

Tools, Equipment and Other Requirements

Industrial maintenance tools, pumps and motors, electrical panels (starters, meters (energy, voltage, amperage, power factor), manual or electrically operated trolley gantry, blow out fuses, valves, gates, scraping bridge trolley, aerators, reduction gears, open air weather casings for motors, sprocket wheels and chains for mechanical grit, water quality monitoring instruments and screen removing devices.





Module 4: Ensuring food safety and personal hygiene *Mapped to FIC/N9901, v1.0*

Terminal Outcomes:

- Explain the ways to ensure food safety and personal hygiene at the workplace
- Demonstrate the steps to be followed for implementing good hygiene and manufacturing practices

Duration: 04:00	Duration: 08:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
 Define hazards and risks. Recall the various types of health and safety equipment available in an organisation and the methods for obtaining them. Discuss the organisational health and safety policies and procedures. Discuss the relevant health and safety standards to be followed in the job as listed in 'The Food Safety and Standards Act, 2006'. Explain the importance of wearing appropriate personal protective equipment (such as eye protection, hard hats, gloves apron, rubber boots, etc.) and ensuring personal hygiene at the workplace. Elucidate the ways to prevent product contamination and cross contamination at the workplace. Discuss the importance of preventive health check-ups for ensuring personal hygiene. State the importance of storing food at specified temperature. Discuss the importance of sanitising self and the work area safely and appropriately. 	 Employ appropriate techniques to prevent product contamination and cross contamination. Demonstrate the steps to be performed for implementing good manufacturing practices (GMP) in a retail environment. Show how to treat injuries such as cuts, boils, skin infections and grazes appropriately. Apply suitable methods for disinfecting the work area and equipment thoroughly. Demonstrate how to wash hands and use alcohol-based sanitisers appropriately. Show how to wear personal protective equipment such as gloves, hairnets, masks, ear plugs, goggles, shoes etc. properly ensuring adequate protection. Prepare a sample report consisting of information such as illness to self and others as per organisational practice. Roleplay a situation on how to communicate with the supervisor for reporting illness of self and others.
Classroom Aids:	
Computer, Projection Equipment, PowerPoint Pre	esentation 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 5: Managing accidents and emergencies Mapped to FIC/N9901, v1.0

- List the various types of accidents and emergencies that can arise at the workplace and the ways to address them
- Demonstrate the steps to be followed to implement emergency and evacuation procedures effectively

Duration: 04:00	Duration: 08:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
 List the various types of health and safety hazards present in the environment. Discuss the possible causes of risk, hazard or accident at the workplace. Elucidate the standard practices and precautions used to control and prevent risks, hazards and accidents at the workplace. Discuss the dangers associated with the use of electrical and other equipment. State the importance of using protective equipment and clothing for specific tasks and work conditions. Discuss the role of organisational protocols in preventing accidents and hazards. Recall the preventive and remedial actions to be taken in the case of exposure to toxic materials at the workplace. Discuss the various causes of fire and ways to prevent them. Elaborate the steps to use different types of fire extinguishers. Explain the procedure to provide artificial respiration and cardio-pulmonary resuscitation (CPR) to the affected. Summarise the rescue techniques to be followed at times of fire hazard. Discuss the significance of various types of hazard and safety signs. Elaborate the type of first-aid treatment to be offered at times of shock, electrical shock, bleeding, breaks to bones, minor 	 Apply appropriate techniques to deal with hazards safely and appropriately. Demonstrate the use of various types of fire extinguishers effectively. Demonstrate appropriate ways to respond to an accident situation or medical emergency promptly and appropriately. Demonstrate the steps to be followed for providing artificial respiration and cardio-pulmonary resuscitation (CPR) in various instances (e.g. cardiac arrest). Perform the steps to be followed during emergency and evacuation procedure. Demonstrate the procedure of freeing a person from electrocution. Show how to administer appropriate first aid to victims in case of cuts, bleeding, burns, choking, electric shock, poisoning etc.





burns, resuscitation, poisoning, eye injuries, etc.

- Discuss about the potential injuries and ill health conditions that are caused due to incorrect manual handling practices.
- List the precautions to be taken while lifting and carrying materials in a food retail environment.

Classroom Aids:

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

Tools, Equipment and Other Requirements

Helmet, gloves, rubber mat, ladder, neon tester, leather or asbestos gloves, flame proof aprons, flame proof overalls buttoned to neck, cuff less (without folds) trousers, reinforced footwear, helmets/hard hats, cap and shoulder covers, ear defenders/plugs, safety boots, knee pads, particle masks, glasses/goggles/visors, hand and face shields, machine guards, residual current Devices, shields, dust sheets, respirator.





Module 6: Working effectively in an organization *Mapped to FIC/N9902, v1.0*

- 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 importance of teamwork in organizational and individual success. 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). 	 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. Dramatise 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 applicable laws, acts and	
provisions defined for PwD by the statutory	
bodies.	
State the importance of gender sensitivity and equality	
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 Pre	esentation and software, Facilitator's Guide,
Participant's Handbook	
Tools, Equipment and Other Requirements	
Nil	





Module 7: Material Conservation Mapped to SGJ/N1702, v1.0

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 Pro	esentation and software, Facilitator's Guide,		
Participant's Handbook			
Tools, Equipment and Other Requirements			
Materials and tools and equipment used at work			





Module 8: Energy/electricity conservation Mapped to SGJ/N1702, v1.0

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 Pro	esentation and software, Facilitator's Guide,
Participant's Handbook	
Tools, Equipment and Other Requirements	
Energy saving devices	





Module 9: Waste management/recycling Mapped to SGJ/N1702, v1.0

- 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 Pre	esentation, Facilitator's Guide, Participant's		
Handbook			
Tools, Equipment and Other Requirements			
Non-recyclable, recyclable waste bins			





Module 10: Employability and Entrepreneurship skills

Bridge Module

- 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		
 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 ecommerce 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 entrepreneurship Describe the traits of successful entrepreneur List the types of enterprises 	 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. 		





 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:	
White board/Chart papers, marker.	
Tools, Equipment and Other Requirements	
NIL	





Annexure

Trainer Requirements

Trainer Prerequisites						
Minimum Educational	cational <specify areas="" of<="" th="" the=""><th colspan="2">Relevant Industry Experience</th><th colspan="2">Training Experience</th><th>Remarks</th></specify>	Relevant Industry Experience		Training Experience		Remarks
Qualification <select the<br="">minimum educational requirements, such as 12th Pass, Graduate or NSQF certified.></select>	specialization that are desirable.>	Years	Specialization	Years	Specialization	
ITI/Diploma	Electrical	3	Supervisor – Electrical department	2	Training electrical equipment installation and maintenance personnel	

Trainer Certification			
Domain Certification	Platform Certification		
Certified for Job Role: "Electrician - Food Processing Facility" mapped to QP: "FIC/Q9504, 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 Specialization Educational <\$pecify the areas	Relevant Industry Experience			Training/Assessment Experience		
Qualification <select minimum<br="" the="">educational requirements, such as 12th Pass, Graduate or NSQF certified.></select>	of specialization that are desirable.>	Years	Specialization	Years	Specialization	
ITI/Diploma	Electrical	2	Supervisor – Electrical department	1	Assessment of individuals who have undergone training in electrical equipment installation and maintenance	

Assessor Certification				
Domain Certification	Platform Certification			
Certified for Job Role: "Electrician - Food Processing Facility" mapped to QP: "FIC/Q9504, 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
 - a. True / False Statements
 - b. Multiple Choice Questions
 - c. 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).
(M) TLO	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
ETP	Effluent Treatment Plant