



Model Curriculum

QP Name: Fitter – Electrical and Electronic Assembly

QP Code: CSC/Q0305

Version: 3.0

NSQF Level: 3

Model Curriculum Version: 3.0

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Training Parameters

Sector	Capital Goods
Sub-Sector	Machine Tools, Plastics Manufacturing Machinery, Textile Manufacturing Machinery, Process Plant Machinery, Electrical and Power Machinery
Occupation	Fitting and Assembly
Country	India
NSQF Level	3
Aligned to NCO/ISCO/ISIC Code	NCO-2015/7241.10, 7241.20, 7242.90, 7242.10
Minimum Educational Qualification and Experience	Ability to Read and Write with 5 years relevant experience Or 5th grade pass with 4 years relevant experience Or 8th grade pass with 1 year relevant experience Or Grade 8 with one year of NTC (Electrical) Or Grade 9 with No Experience
Pre-Requisite License or Training	NA
Minimum Job Entry Age	18 Years
Last Reviewed On	31/03/2022
Next Review Date	31/03/2025
NSQC Approval Date	31/03/2022
QP Version	3.0
Model Curriculum Creation Date	31/03/2022
Model Curriculum Valid Up to Date	31/03/2025
Model Curriculum Version	3.0
Minimum Duration of the Course	360 Hours
Maximum Duration of the Course	360 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 learner should have acquired the listed knowledge and skills to:

- Explain the importance of following the health and safety practices at work.
- Demonstrate ways to coordinate with co-workers to achieve work efficiency.
- Demonstrate the process of setting the CNC VMC for operations.
- Demonstrate the process of carrying out machining using the CNC Vertical Machining Centre (VMC).

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
CSC/N1335 Follow the health and safety practices at work NOS Version- 2.0 NSQF Level- 3	25:00	35:00	0:00	00:00	60:00
Module 1: Introduction to the role of a Fitter – Electrical and Electronic Assembly	05:00	0:00	0:00	00:00	06:00
Module 2: Health and safety practices	20:00	35:00	0:00	00:00	55:00
CSC/N1336 Coordinate with co-workers to achieve work efficiency NOS Version-2.0 NSQF Level- 3	10:00	20:00	0:00	00:00	30:00
Module 3: Process of coordinating with co-workers to achieve work efficiency	10:00	20:00	0:00	00:00	30:00
CSC/N0305 Assemble and wire electrical components and systems to mechanical equipment NOS Version- 2.0 NSQF Level- 3	30:00	60:00	30:00	00:00	90:00

Module 4: Process of assembling and wiring electrical components and systems to mechanical equipment	30:00	60:00	30:00	00:00	90:00
CSC/N0306: Assemble and wire electronic equipment and systems to mechanical equipment NOS Version- 2.0 NSQF Level- 3	25:00	65:00	30:00	00:00	90:00
Module 5: Process of assembling and wiring electronic equipment and systems to mechanical equipment	25:00	65:00	30:00	00:00	90:00
DGT/VSQ/N0101 - Employability Skills (30 hours) NOS Version No. – 1.0 NSQF Level – 2	12:00	18:00	0:00	00:00	30:00
Module 6: Introduction to Employability Skills	0.5:00	0.5:00	0:00	00:00	1:00
Module 7: Constitutional values - Citizenship	0.5:00	0.5:00	0:00	00:00	1:00
Module 8: Becoming a Professional in the 21st Century	0.5:00	0.5:00	0:00	00:00	1:00
Module 9: Basic English Skills	1:00	1:00	0:00	00:00	2:00
Module 10: Communication Skills	1.5:00	2.5:00	0:00	00:00	4:00
Module 11: Diversity & Inclusion	0.5:00	0.5:00	0:00	00:00	1:00
Module 12: Financial and Legal Literacy	1.5:00	2.5:00	0:00	00:00	4:00
Module 13: Essential Digital Skills	1:00	2:00	0:00	00:00	3:00
Module 14: Entrepreneurship	2.5:00	4.5:00	0:00	00:00	7:00
Module 15: Customer Service	1.5:00	2.5:00	0:00	00:00	4:00
Module 16: Getting ready for apprenticeship & Jobs	1:00	1:00	0:00	00:00	2:00
Total Duration	102:00	198:00	60:00	00:00	360:00

Module Details

Module 1: Introduction to the role of a Fitter – Electrical and Electronic Assembly

Mapped to CSC/N1335 v2.0

Terminal Outcomes:

- Discuss the job role of a Fitter – Electrical and Electronic Assembly.

Duration: 05:00	Duration: 0:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Describe the size and scope of the capital good industry and its sub-sectors. • Discuss the role and responsibilities of a Fitter – Electrical and Electronic Assembly. • Identify various employment opportunities for a Fitter – Electrical and Electronic Assembly. 	
Classroom Aids	
Training Kit - Trainer Guide, Presentations, Whiteboard, Marker, Projector, Laptop, Video Films	
Tools, Equipment and Other Requirements	
NA	

Module 2: Health and safety Practices

Mapped to CSC/N1335 v2.0

Terminal Outcomes:

- Demonstrate ways to maintain personal health and safety.
- Describe the process of assisting in hazard management.
- Explain how to check the first aid box, firefighting and safety equipment.
- Describe the process of assisting in waste management.
- Explain the importance of following the fire safety guidelines.
- Explain the importance of following the emergency and first-aid procedures.
- Demonstrate the process of carrying out relevant documentation and review.

Duration: 20:00	Duration: 35:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Explain the recommended practices to be followed to ensure protection from infections and transmission to others, such as the use of hand sanitiser and face mask. • Explain the importance and process of checking the work conditions, assessing the potential health and safety risks, and take appropriate measures to mitigate them. • Explain the importance and process of selecting and using the appropriate PPE relevant to the task and work conditions. • Explain the recommended techniques to be followed while lifting and moving heavy objects to avoid injury. • Explain the importance of following the manufacturer's instructions and workplace safety guidelines while working on heavy machinery, tools and equipment. • Explain the importance and process of identifying existing and potential hazards at work. • Describe the process of assessing the potential risks and injuries associated with the various hazards. • Explain how to prevent or minimise different types of hazards. • Explain how to handle and store hazardous materials safely. • Explain the importance of ensuring the first aid box is updated with the relevant first aid supplies. • Describe the process of checking and testing the firefighting and various safety equipment to ensure they are in a usable condition. 	<ul style="list-style-type: none"> • Demonstrate the use of appropriate Personal Protective Equipment (PPE) relevant to the task and work conditions. • Demonstrate how to handle hazardous materials safely. • Demonstrate the process of testing the firefighting and various safety equipment to ensure they are in usable condition. • Demonstrate the process of recycling and disposing different types of waste appropriately. • Demonstrate how to use the appropriate type of fire extinguisher to extinguish different types of fires safely. • Demonstrate how to administer appropriate first aid to the injured personnel. • Demonstrate the process of performing Cardiopulmonary Resuscitation (CPR) on a potential victim of cardiac arrest. • Demonstrate the process of carrying out appropriate documentation following a health and safety incident at work, including all the required information.

- Explain the criteria for segregating waste into appropriate categories.
- Describe the appropriate methods for recycling recyclable waste.
- Describe the process of disposing of the non-recyclable waste safely and the applicable regulations.
- Explain the use of different types of fire extinguishers to extinguish different types of fires.
- State the recommended practices to be followed for a safe rescue during a fire emergency.
- Explain how to request assistance from the fire department to extinguish a serious fire.
- Explain the appropriate practices to be followed during workplace emergencies to ensure safety and minimise loss to organisational property.
- State the common health and safety hazards present in a work environment, associated risks, and how to mitigate them.
- State the safe working practices to be followed while working at various hazardous sites and using electrical equipment.
- Explain the importance of ensuring easy access to firefighting and safety equipment.
- Explain the appropriate preventative and remedial actions to be taken in the case of exposure to toxic materials, such as poisonous chemicals and gases.
- Explain various causes of fire in different work environments and the recommended precautions to be taken to prevent fire accidents.
- Describe different methods of extinguishing fire.
- List different materials used for extinguishing fire.
- Explain the applicable rescue techniques to be followed during a fire emergency.
- Explain the importance of placing safety signs and instructions at strategic locations in a workplace and following them.
- Explain different types of first aid treatment to be provided for different types of injuries.
- State the potential injuries associated with incorrect manual handling.

- Explain how to move an injured person safely.
- State various hazards associated with the use of various machinery, tools, implements, equipment and materials.
- Explain the importance of ensuring no obstruction and free access to fire exits.
- Explain how to free a person from electrocution safely.
- Explain how to administer appropriate first aid to an injured person.
- Explain how to perform Cardiopulmonary Resuscitation (CPR).
- Explain the importance of coordinating with the emergency services to request urgent medical assistance for persons requiring professional medical attention or hospitalisation.
- State the appropriate documentation to be carried out following a health and safety incident at work, and the relevant information to be included.
- Explain the importance and process of reviewing the health and safety conditions at work regularly or following an incident.
- Explain the importance and process of implementing appropriate changes to improve the health and safety conditions at work.

Classroom Aids

Computer, Projection Equipment, PowerPoint Presentation and Software, Facilitator’s Guide, Participant’s Handbook.

Tools, Equipment and Other Requirements

Personal Protective Equipment, Cleaning Equipment and Materials, Sanitizer, Soap, Mask

Module 3: Process of coordinating with co-workers to achieve work efficiency

Mapped to NOS CSC/N1336 v2.0

Terminal Outcomes:

- Demonstrate ways to Work and communicate effectively with co-workers.
- Discuss ways to promote diversity and inclusion at the workplace.

Duration: 10:00	Duration: 20:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Explain the importance and process of effective communication in the workplace. • Explain the barriers to effective communication and how to overcome them. • Explain the importance of teamwork in an organisation’s and individual’s success. • Explain the importance of active listening in the work environment. • State the appropriate techniques to be followed for active listening. • Explain the importance of tone and pitch ineffective communication. • Explain the importance of avoiding casual expletives and unpleasant terms while communicating professional circles. • Explain the importance of maintaining discipline and ethical behaviour at work. • State the common reasons for interpersonal conflict and how to resolve them. • Explain the importance of developing effective working relationships for professional success. • Describe the process of expressing and addressing grievances appropriately and effectively. • Explain the importance and process of planning daily tasks to ensure their timely completion and efficient use of time. • Explain the importance of adhering to the limits of authority at work. • Explain the importance of following the applicable quality standards and timescales at work. • Explain the importance of coordinating with co-workers to achieve the work objectives efficiently. • Explain the relevant documentation 	<ul style="list-style-type: none"> • Demonstrate the process of preparing the relevant documents and reports as per the supervisor’s instructions, providing appropriate information clearly and systematically. • Demonstrate how to mentor and assist subordinates in the execution of their work responsibilities. • Demonstrate the process of using various resources efficiently to ensure maximum utilisation and minimum wastage. • Demonstrate how to communicate clearly and politely to ensure effective communication with co-workers. • Demonstrate appropriate verbal and non-verbal communication that is respectful of genders and disability.

<p>requirements.</p> <ul style="list-style-type: none"> • Explain the importance of providing appropriate information clearly and systematically in work documents. • State the escalation matrix to be followed to deal with out of authority tasks and concerns. • Explain the importance and process of mentoring and assisting subordinates in execution of their work responsibilities. • Explain how to identify possible disruptions to work prevent them. • Explain how to use various resources efficiently to ensure maximum utilisation and minimum wastage. • Explain the recommended practices to be followed at work to avoid and resolve conflicts at work. • Explain the importance and process of efficient and timely dissemination of information to the authorised personnel. • Explain the procedure to report inappropriate behaviour e.g., harassment. 	
<p>Classroom Aids:</p>	
<p>Training Kit (Trainer Guide, Presentations). Whiteboard, Marker, Projector, Laptop</p>	
<p>Tools, Equipment and Other Requirements</p>	
<p>NA</p>	

Module 4: Process of assembling and wiring electrical components and systems to mechanical equipment

Mapped to CSC/N0305 v2.0

Terminal Outcomes:

- Demonstrate the process of assembling and wiring electrical components and systems.
- Explain the importance of using resources optimally.

Duration: 30:00	Duration: 60:00
<p>Theory – Key Learning Outcomes</p> <ul style="list-style-type: none"> • State the applicable documentation requirements and related procedures in the job role. • Explain the relevant safety practices and procedures to be followed while assembling and wiring electrical components mounted on panels or in enclosures. • List the various items used with panels and enclosures. • Explain the various hazards associated with assembling and wiring electrical panels, such as the use of sharp instruments for stripping cable insulation, and soldering equipment, and how to minimise them. • Explain the importance and process of using appropriate PPE such as anti-static earthed wrist straps and mats. • Explain the importance of maintaining cleanliness in the work area. • Explain how to deal with hazardous voltage. • Explain how to free a victim from electrocution and the appropriate first-aid to be administered to them. • Explain the use of insulated tools, rubber matting and isolating transformers to reduce the risks of a phase to earth shock. • State the relevant precautions to be taken to prevent Electrostatic Discharge (ESD) damage to circuits and sensitive components • Explain how to interpret drawings, circuit and physical layouts, charts, specifications, graphical electrical symbols, etc. • State the applicable national and international wiring regulations. • Explain the functions of different types of 	<p>Practical – Key Learning Outcomes</p> <ul style="list-style-type: none"> • Demonstrate how to perform electrical calculations using a range of variables. • Demonstrate the process of assembling electrical components on panels or in enclosures. • Show how to secure the components using the recommended connectors and securing devices. • Show how to wire and terminate cables to the appropriate connections on the components. • Demonstrate the use of the relevant Personal Protective Equipment (PPE). • Demonstrate the use of various industry 4.0 manufacturing technologies. • Demonstrate the process of carrying out minor repair and maintenance of the relevant tools and equipment. • Demonstrate the process of disposing of industrial waste appropriately. • Show how to use electricity and other resources optimally in various tasks and processes.

components and sub-assemblies used in the assembly activities such as contactors; relays/ Switch Mode Power Supply (SMPS); ballast chokes; terminal blocks; etc.

- State the appropriate preparations to be undertaken on the components and enclosure before the mounting activities.
- Explain how the components must be aligned and positioned before securing, and the use of relevant tools and equipment.
- Explain how to identify any orientation requirements, values or polarity for the components used in the electrical assembly and wiring activities.
- Explain various types of cabling to be used in the assembly and wiring of the panels or enclosures, such as single-core, screened, twisted pair/ribbon, multicore, fibre-optic, data/ communication, laminated copper, braided copper, etc.
- Explain the importance of electrical bonding/earthing, and the process of ensuring it is mechanically and electrically secure.
- Describe the process of selecting wires and cables according to the requirement and applicable safety procedures.
Describe the applicable assembly methods and techniques to be used when wiring electrical panels or components mounted in enclosures.
- Describe the process of cable stripping, soldering, crimping, securing wires and cables using cable ties/ lacing/strapping/ harnessing of wires etc.
- Explain different types, applications, and methods of attaching identification markers/labels during the electrical wiring activities.
- Describe the process of conducting necessary checks to ensure the accuracy and quality of assembly.
- Explain how to check the positional accuracy of all components; termination of all wires to components; orientation; security of terminations; alignment; completeness; component security; etc.
- Describe the process of checking cable offcuts/ insulation, enclosure/trunking breakouts; continuity of cable/wiring connections e.g. battery and lamp checks.

- Explain the importance of checking that tools and equipment are free from damage or defects, and in a safe and usable condition with appropriate testing and calibration.
- Explain the functions and application of various electrical components.
- State the current and voltage distribution in series and parallel circuits.
- Explain how to make screwed/clamped connections; install and terminate pre-formed looms; make crimped connections; making soldered connections, etc.
- Explain different types of cable and wires such as single-core, screened, twisted pair/ribbon, multicore, fibre-optic, data/communication, laminated copper, braided copper, etc.
- Explain the importance of conducting visual checks for the completeness of conductors or components; mechanical checks to be conducted for the security of components and connections.
- List various checks to be conducted to ensure electrical continuity and earth continuity.
- Explain the benefits and methods of resource optimisation.

Classroom Aids

Training Kit (Trainer Guide, Presentations). Whiteboard, Marker, Projector, Laptop

Tools, Equipment and Other Requirements

Cable Ties, Clips, Plastic Strapping, Lacing, Harnessing, Sleeves or Grommets, Spade End, Loops, Tags and Pins Single Core, Screened, Twisted Pair/Ribbon, Multicore, Fibreoptic, Data/Communication, Laminated Copper, Braided Copper, Sensors; Contactors; Capacitors; Plugs/Sockets; Overload And Other Relays; Resistors; Grommets/Grommet Strip, Cutting Tools Measuring Tools, Hand Tools, PPE, Etc.

Module 5: Process of assembling and wiring electronic equipment and systems to mechanical equipment

Mapped to CSC/N0306 v2.0

Terminal Outcomes:

- Demonstrate the process of assembling and wiring electronic equipment and systems.
- Explain the importance of following safety guidelines.

Duration: 25:00	Duration: 65:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Explain the importance of leaving the work area in a safe and clean condition on completion of the electronic assembly and wiring activities. • Explain the importance of storing the tools and equipment safely at the designated storage. • Describe the process of dealing with and disposing of industrial waste. • State the relevant safety precautions to be taken while working with soldering and crimping equipment/tools and wiring aids within an electronics assembly and wiring environment. • State the regulations and standards relevant to electronic wiring and assembly operations. • Explain how to interpret and use single line diagram. • Explain how mechanical assembly instructions are represented and how to interpret them. • Explain how to set up, program and use automated wiring termination equipment. • Describe the process of attaching wire terminations following the appropriate methods such as soldering, crimping, etc. • Explain how to set/position interconnection wiring and bundle/strap/tie wiring looms and cables. • Describe the process of setting and terminating fibre optic links. • Explain how to strip insulation from wires ends. • Describe the process of termination identification such as ferruling, transfer printing; tin/lead soldering; lead-free soldering systems; no-wash fluxing; 	<ul style="list-style-type: none"> • Demonstrate how to analyse the assembly drawings and charts; interconnection net diagrams; wiring specifications; wire running lists to determine the job specifications. • Show how to prepare cable strapping for use by cutting them to nominal length in appropriate sizes. • Demonstrate how to set up, program and use automated wiring termination equipment. • Demonstrate the process of attaching wire terminations following an appropriate method such as soldering, crimping, etc. • Show how to cut wires appropriately to the required length, and strip insulation from wire ends. • Demonstrate how to use the relevant manual/ automatic tools to secure all fastenings. • Demonstrate the process of assembling sub-units to support housings/brackets, along with connectors and allied devices. • Show how to secure the components using the appropriate connectors and securing devices. • Prepare the sample relevant records as per the applicable organisational procedures. • Demonstrate the use of the relevant power and manual tools, equipment, and accessories as per the manufacturer's instructions.

crimping, etc.

- Explain how different types of electronic wiring and insulation are coded and specified.
- Explain how information on wiring interconnections is specified concerning the role of wiring schedules, wire-running lists; and backplane net interconnects lists.
- List various accessories and aids used for securing electronic wiring such as heat shrink sleeves, strapping, cable ties, P-Clips, etc.
- List various tools and aids used in wiring and assembly work, such as soldering tools and equipment, crimp tools, joint/crimp, etc.
- Describe the process of testing and checking equipment for continuity, and short circuit testing.
- Explain how to recognise wiring types and sizes, their identification, coding and range of termination methods.
- Explain how to identify the types and read the values of electronic components.
- Explain how to take anti-static precautions concerning component handling during the wiring and assembly of electronic products.
- State the handling requirements and termination methods used for Switch-Mode Power Supply (SMPS), high-level protective devices and fibre-optic links.
List various checks and tests carried out within wiring and assembly work such as insulation resistance, flashover testing, continuity, short circuit testing, etc.
- Explain the calibration requirements for tools and equipment used in wiring.
- Explain the importance of maintaining a dust-free environment for electronic assembly.
- Explain how to handle multilayered populated Printed Circuit Boards (PCBs).
- Explain various problems encountered with wiring and assembly work and how to resolve them.
- List the basic units used in electro-technology.
- Explain the function and applications of various electrical components.
- Describe the process of current and

<p>voltage distribution in series and parallel circuits.</p> <ul style="list-style-type: none"> • Describe the process of determining the input and output voltage of double wound transformers. • Explain how to construct a simple bridge rectifier circuit, its functions and termination identification, such as ferruling and transfer printing; tin/lead soldering; lead-free soldering; no-wash fluxing; crimping, etc. 	
<p>Classroom Aids</p>	
<p>Training Kit (Trainer Guide, Presentations). Whiteboard, Marker, Projector, Laptop</p>	
<p>Tools, Equipment and Other Requirements</p>	
<p>Returning Tools and Equipment, In/Lead Soldering; Lead-Free Soldering Systems; No-Wash Fluxing; Crimping, Heat Shrink Sleeves, Strapping, Cable Ties, P-Clips), Resistors, Capacitors, Diodes, Integrated Circuits, Pcb, Transformers</p>	

Module 6: Introduction to Employability Skills

Mapped to DGT/VSQ/N0101

Terminal Outcomes:

- Discuss about Employability Skills in meeting the job requirements

Duration: <0.5:00>	Duration: <0.5:00>
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Discuss the importance of Employability Skills in meeting the job requirements 	<ul style="list-style-type: none"> • Demonstrate Employability Skills
Classroom Aids:	
Whiteboard, marker pen, projector	
Tools, Equipment and Other Requirements	

Module 7: Constitutional values - Citizenship

Mapped to DGT/VSQ/N0101

Terminal Outcomes:

- Discuss about constitutional values to be followed to become a responsible citizen

Duration: <0.5:00>	Duration: <0.5:00>
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Explain constitutional values, civic rights, duties, citizenship, responsibility towards society etc. that are required to be followed to become a responsible citizen. 	<ul style="list-style-type: none"> • Show how to practice different environmentally sustainable practices
Classroom Aids:	
Whiteboard, marker pen, projector	
Tools, Equipment and Other Requirements	

Module 8: Becoming a Professional in the 21st Century

Mapped to DGT/VSQ/N0101

Terminal Outcomes:

- Demonstrate professional skills required in 21st century

Duration: <0.5:00>	Duration: <0.5:00>
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Discuss 21st century skills. 	<ul style="list-style-type: none"> • Display positive attitude, self -motivation, problem solving, time management skills and continuous learning mindset in different situations.
Classroom Aids:	
Whiteboard, marker pen, projector	
Tools, Equipment and Other Requirements	

Module 9: Basic English Skills

Mapped to DGT/VSQ/N0101

Terminal Outcomes:

- Practice basic English speaking.

Duration: <1:00>	Duration: <1:00>
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Discuss need of basic English skills. 	<ul style="list-style-type: none"> • Use appropriate basic English sentences/phrases while speaking
Classroom Aids:	
Whiteboard, marker pen, projector	
Tools, Equipment and Other Requirements	

Module 10: Communication Skills

Mapped to DGT/VSQ/N0101

Terminal Outcomes:

- Practice basic communication skills.

Duration: <1.5:00>	Duration: <2.5:00>
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Discuss need of communication skills • Describe importance of team work 	<ul style="list-style-type: none"> • Demonstrate how to communicate in a well -mannered way with others. • Demonstrate working with others in a team
Classroom Aids:	
Whiteboard, marker pen, projector	
Tools, Equipment and Other Requirements	

Module 11: Diversity & Inclusion

Mapped to DGT/VSQ/N0101

Terminal Outcomes:

- Describe PwD and gender sensitisation.

Duration: <0.5:00>	Duration: <0.5:00>
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Discuss the significance of reporting sexual harassment issues in time 	<ul style="list-style-type: none"> • Show how to conduct oneself appropriately with all genders and PwD
Classroom Aids:	
Whiteboard, marker pen, projector	
Tools, Equipment and Other Requirements	

Module 12: Financial and Legal Literacy

Mapped to DGT/VSQ/N0101

Terminal Outcomes:

- Describe ways of managing expenses, income, and savings.

Duration: <1.5:00>	Duration: <2.5:00>
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Discuss the significance of using financial products and services safely and securely. • Explain the importance of managing expenses, income, and savings. • Explain the significance of approaching the concerned authorities in time for any exploitation as per legal rights and laws 	<ul style="list-style-type: none"> • Demonstrate ways of managing expenses, income, and savings.
Classroom Aids:	
Whiteboard, marker pen, projector	
Tools, Equipment and Other Requirements	

Module 13: Essential Digital Skills

Mapped to DGT/VSQ/N0101

Terminal Outcomes:

- Demonstrate procedure of operating digital devices and associated applications safely.

Duration: <1:00>	Duration: <2:00>
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Discuss the significance of using internet for browsing, accessing social media platforms, safely and securely 	<ul style="list-style-type: none"> • Show how to operate digital devices and use the associated applications and features, safely and securely
Classroom Aids:	
Whiteboard, marker pen, projector	
Tools, Equipment and Other Requirements	

Module 14: Entrepreneurship

Mapped to DGT/VSQ/N0101

Terminal Outcomes:

- Describe opportunities as an entrepreneur.

Duration: <2.5:00>	Duration: <4.5:00>
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Discuss the need for identifying opportunities for potential business, sources for arranging money and potential legal and financial challenges 	<ul style="list-style-type: none"> • Demonstrate ways for identifying opportunities for potential business, sources for arranging money and potential legal and financial challenges
Classroom Aids:	
Whiteboard, marker pen, projector	
Tools, Equipment and Other Requirements	

Module 15: Customer Service

Mapped to DGT/VSQ/N0101

Terminal Outcomes:

- Describe ways of maintaining customer.

Duration: <1.5:00>	Duration: <2.5:00>
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Differentiate between types of customers. • Explain the significance of identifying customer needs and addressing them. • Discuss the significance of maintaining hygiene and dressing appropriately. 	<ul style="list-style-type: none"> • Show how to maintain hygiene and dressing appropriately.
Classroom Aids:	
Whiteboard, marker pen, projector	
Tools, Equipment and Other Requirements	

Module 16: Getting ready for apprenticeship & Jobs

Mapped to DGT/VSQ/N0101

Terminal Outcomes:

- Describe ways of preparing for apprenticeship & Jobs appropriately.

Duration: <1:00>	Duration: <1:00>
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> Discuss the significance of dressing up neatly and maintaining hygiene for an interview Discuss how to search and register for apprenticeship opportunities 	<ul style="list-style-type: none"> Create a biodata Use various sources to search and apply for jobs
Classroom Aids:	
Whiteboard, marker pen, projector	
Tools, Equipment and Other Requirements	

Annexure

Trainer Requirements

Trainer Prerequisites						
Minimum Educational Qualification	Specialization	Relevant Industry Experience		Training Experience		Remarks
		Years	Specialization	Years	Specialization	
Diploma /Degree	Diploma /Degree in Mechanical Engineering	4	Fitter – Electrical and Electronic Assembly	0		Practical skills and knowledge required in the relevant field
Certified in relevant CITS course as appropriate						

Trainer Certification	
Domain Certification	Platform Certification
<p>“Fitter – Electrical and Electronic Assembly, CSC/Q0305, v3.0”.</p> <p>The minimum accepted score is 80%</p>	<p>“Trainer, MEP/Q2601”</p> <p>Minimum accepted score is 80%.</p>

Assessor Requirements

Assessor Prerequisites						
Minimum Educational Qualification	Specialization	Relevant Industry Experience		Training/Assessment Experience		Remarks
		Years	Specialization	Years	Specialization	
Diploma /Degree	Diploma /Degree in Mechanical Engineering	4	Fitter – Electrical and Electronic Assembly	0		Practical skills and knowledge required in the relevant field
Certified in relevant CITS course as appropriate						

Assessor Certification	
Domain Certification	Platform Certification
<p>“Fitter – Electrical and Electronic Assembly, CSC/Q0305, v3.0”.</p> <p>The minimum accepted score is 80%</p>	<p>“Assessor, MEP/Q2701”</p> <p>Minimum accepted score is 80%.</p>

Assessment Strategy

1. Assessment System Overview:

- Batches assigned to the assessment agencies for conducting the assessment on SDMS/SIP or email
- Assessment agencies send the assessment confirmation to VTP/TC looping SSC
- The assessment agency deploys the ToA certified Assessor for executing the assessment
- SSC monitors the assessment process & records

2. Testing Environment

To ensure a conducive environment for conducting a test, the trainer will:

- Confirm that the centre is available at the same address as mentioned on SDMS or SIP
- Check the duration of the training.
- Check the Assessment Start and End time to be 10 a.m. and 5 p.m. respectively
- Ensure there are 2 Assessors if the batch size is more than 30.
- Check that the allotted time to the candidates to complete Theory & Practical Assessment is correct.
- Check the mode of assessment—Online (TAB/Computer) or Offline (OMR/PP).
- Confirm the number of TABs on the ground are correct to execute the Assessment smoothly.
- Check the availability of the Lab Equipment for the particular Job Role.

3. Assessment Quality Assurance levels / Framework:

- Question papers created by the Subject Matter Experts (SME)
- Question papers created by the SME verified by the other subject Matter Experts
- Questions are mapped with NOS and PC
- Question papers are prepared considering that levels 1 to 3 are for the unskilled & semi-skilled individuals, and levels 4 and above are for the skilled, supervisor & higher management
- The assessor must be ToA certified and the trainer must be ToT Certified
- The assessment agency must follow the assessment guidelines to conduct the assessment

4. Types of evidence or evidence-gathering protocol:

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

5. Method of verification or validation:

To verify the details submitted by the training centre, the assessor will undertake:

- A surprise visit to the assessment location
- A random audit of the batch
- A random audit of any candidate

6. Method for assessment documentation, archiving, and access

To protect the assessment papers and information, the assessor will ensure:

- Hard copies of the documents are stored

- Soft copies of the documents & photographs of the assessment are uploaded/accessed from Cloud Storage
- Soft copies of the documents & photographs of the assessment are stored on the Hard drive

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	The 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
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	The 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
NOS	National Skills Qualification Committee
NSQF	National Skills Qualification Framework
OJT	On-the-Job Training
OMR	Optical Mark Recognition
PC	Performance Criteria
PwD	Persons with Disabilities
QP	Qualification Pack
SDMS	Skill Development & Management System
SIP	Skill India Portal
SSC	Sector Skill Council
TC	Trainer Certificate
ToA	Training of Assessors
ToT	Training of Trainers
TP	Training Provider