









Solar Panel Installation Technician

QP Code: ELE/Q5901

Version: 4.0

NSQF Level: 4

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ELE/Q5901: Solar Panel Installation Technician

Brief Job Description

Solar Panel Installation Technician in this job checks the installation site, understands the layout requirement as per design, assesses precautionary measures to be taken, installs the solar panel as per customers requirement and ensures effective functioning of the system post installation

Personal Attributes

Solar Panel Installation Technician in this job checks the installation site, understands the layout requirement as per design, assesses precautionary measures to be taken, installs the solar panel as per customers requirement and ensures effective functioning of the system post installation

Applicable National Occupational Standards (NOS)

Compulsory NOS:

- 1. ELE/N5901: Check site conditions, collect tools and raw materials
- 2. ELE/N5902: Install the Solar Panel
- 3. DGT/VSQ/N0101: Employability Skills (30 Hours)

Qualification Pack (QP) Parameters

| Sector | Electronics |
|-------------------------------|--------------------|
| Sub-Sector | Solar & LED |
| Occupation | Installation-S&L |
| Country | India |
| NSQF Level | 4 |
| Credits | 16 |
| Aligned to NCO/ISCO/ISIC Code | NCO-2015/7421.1401 |









| Minimum Educational Qualification & Experience | 12th grade Pass (12th grade or equivalent) with NA of experience OR 10th grade pass (10th grade or equivalent) with 3 Years of experience Relevant Experience in Solar & LED OR Previous relevant Qualification of NSQF Level (Certificate-NSQF (Level-3 in relevant domain)) with 3 Years of experience Relevant Experience in Solar & LED |
|--|--|
| Minimum Level of Education for Training in School | 10th Class |
| Pre-Requisite License or Training | NA |
| Minimum Job Entry Age | 16 Years |
| Last Reviewed On | NA |
| Next Review Date | 07/10/2028 |
| NSQC Approval Date | 07/10/2025 |
| Version | 4.0 |
| Reference code on NQR | QG-04-EH-04471-2025-V2-ESSCI |
| NQR Version | 2 |

Remarks:









ELE/N5901: Check site conditions, collect tools and raw materials

Description

This NOS unit is about assessing the conditions at site where the solar panels would be installed, understanding the customer requirement in installation and arranging the tools and raw materials required for solar panel installation

Scope

The scope covers the following:

- Introduction of solar technology and Identify plan the work target
- Assessing site conditions
- Identify the installation requirement
- Collecting recommended material for installation
- Ensure proper handling and storage of material

Elements and Performance Criteria

Introduction of solar technology and Identify plan the work target

To be competent, the user/individual on the job must be able to:

- **PC1.** Introduce solar energy as a renewable source and explain how PV cells convert sunlight into electricity. Outline key parts like panels, inverter, battery, and how they function together in a solar setup.
- **PC2.** Interact with the supervisor to understand the installation targets, individual work requirements, and areas of operation; conduct site surveys using GPS to identify installation locations, plan daily activities, and finalize the work plan for each installation.

Assessing site conditions

To be competent, the user/individual on the job must be able to:

- **PC3.** assess the site for identify pre-requisites for solar panel installation
- **PC4.** select the type of smart mounting to be made such as roof top, open fields, small spaces and mounting accessories required for installation as per the site condition
- **PC5.** select the place of installation where maximum period of sunlight is captured in the area
- **PC6.** ensure that land is levelled for flat surface mounting and construction is strong to hold solar panel for 20-25 years, especially, on roof top
- **PC7.** identify any civil construction requirements for installing the panels and inform the customer for same

Identify the installation requirement

To be competent, the user/individual on the job must be able to:

- **PC8.** interact with customer and understand the purpose of installation and suggest alternatives
- **PC9.** obtain the location and mounting preference of customer
- **PC10.** match the voltage and power output of the type of installation designed and losses with customer requirement









- **PC11.** inform customer about the approximate time required for installation and any requirements during installation
- **PC12.** get concurrence from the customer on the package of materials to be procured for installation based on agreed design

Collecting recommended material for installation

To be competent, the user/individual on the job must be able to:

- **PC13.** arrange and collect the material such as solar panels as per customers requirement, mounting stands as per design, tools and consumables required for mounting the solar panels
- **PC14.** ensure that the quantity of modules / panels match the voltage requirement of the system
- **PC15.** ensure that only company recommended quality materials are used unless specified by customer
- **PC16.** ensure all the materials procured are QC passed, module is not damaged and the outer glass is not broken

Ensure proper handling and storage of material

To be competent, the user/individual on the job must be able to:

- **PC17.** identify the material handling requirement and follow the standard operating procedure while moving the material
- **PC18.** follow the standard module handling procedure such as two people should lift a module, module should not be carried on head, etc.
- **PC19.** cover the glass module with an opaque material in storage to ensure that there is no electricity generation before installation
- **PC20.** ensure that modules are stored in a way that they will not get not damaged by falling or by any external disturbance

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** Understand the basics of solar energy and photovoltaic (PV) technology, including how solar panels convert sunlight into electricity.
- **KU2.** Knowledge of solar system components such as PV modules, mounting structures, inverters, and batteries, and their role in power generation
- **KU3.** Awareness of site assessment parameters such as sunlight availability, structural strength, land leveling, and civil requirements for mounting.
- **KU4.** Understand customer requirements related to system capacity, voltage output, and installation timelines for appropriate design planning.
- **KU5.** Knowledge of safe handling, storage standards, and quality compliance for solar modules, mounting parts, and related equipment.

Generic Skills (GS)

User/individual on the job needs to know how to:









- **GS1.** Ability to interact with supervisors and customers to understand work targets and installation expectations clearly
- **GS2.** Skill in conducting site surveys using tools like GPS and planning installation locations based on sun exposure and access
- **GS3.** Competence in selecting proper mounting solutions and collecting QC-approved material according to system design.
- **GS4.** Ability to assess installation readiness, identify civil construction needs, and coordinate accordingly.
- **GS5.** Follow SOPs for safe material handling and storage while preventing damage and ensuring secure working conditions.









Assessment Criteria

| Assessment Criteria for Outcomes | Theory Marks | Practical Marks | Project Marks | Viva Marks |
|--|-----------------|--------------------|------------------|---------------|
| Introduction of solar technology and Identify plan the work target | 4 | 6 | - | - |
| PC1. Introduce solar energy as a renewable source and explain how PV cells convert sunlight into electricity. Outline key parts like panels, inverter, battery, and how they function together in a solar setup. | - | - | - | - |
| PC2. Interact with the supervisor to understand the installation targets, individual work requirements, and areas of operation; conduct site surveys using GPS to identify installation locations, plan daily activities, and finalize the work plan for each installation. | - | - | - | - |
| Assessing site conditions | 5 | 12 | - | - |
| PC3. assess the site for identify pre-requisites for solar panel installation | - | - | - | - |
| PC4. select the type of smart mounting to be made such as roof top, open fields, small spaces and mounting accessories required for installation as per the site condition | - | - | - | - |
| PC5. select the place of installation where maximum period of sunlight is captured in the area | - | - | - | - |
| PC6. ensure that land is levelled for flat surface mounting and construction is strong to hold solar panel for 20-25 years, especially, on roof top | - | - | - | - |
| PC7. identify any civil construction requirements for installing the panels and inform the customer for same | - | - | - | - |
| Identify the installation requirement | 10 | 14 | - | - |
| PC8. interact with customer and understand the purpose of installation and suggest alternatives | - | - | - | - |
| PC9. obtain the location and mounting preference of customer | - | - | - | - |









| Assessment Criteria for Outcomes | Theory Marks | Practical Marks | Project Marks | Viva Marks |
|---|-----------------|--------------------|------------------|---------------|
| PC10. match the voltage and power output of the type of installation designed and losses with customer requirement | - | - | - | - |
| PC11. inform customer about the approximate time required for installation and any requirements during installation | - | - | - | - |
| PC12. get concurrence from the customer on the package of materials to be procured for installation based on agreed design | - | - | - | - |
| Collecting recommended material for installation | 9 | 14 | - | - |
| PC13. arrange and collect the material such as solar panels as per customers requirement, mounting stands as per design, tools and consumables required for mounting the solar panels | - | - | - | - |
| PC14. ensure that the quantity of modules / panels match the voltage requirement of the system | - | - | - | - |
| PC15. ensure that only company recommended quality materials are used unless specified by customer | - | - | - | - |
| PC16. ensure all the materials procured are QC passed, module is not damaged and the outer glass is not broken | - | - | - | - |
| Ensure proper handling and storage of material | 7 | 19 | - | - |
| PC17. identify the material handling requirement and follow the standard operating procedure while moving the material | - | - | - | - |
| PC18. follow the standard module handling procedure such as two people should lift a module, module should not be carried on head, etc. | - | - | - | - |
| PC19. cover the glass module with an opaque material in storage to ensure that there is no electricity generation before installation | - | - | - | - |
| PC20. ensure that modules are stored in a way that they will not get not damaged by falling or by any external disturbance | - | - | - | - |









| Assessment Criteria for Outcomes | Theory | Practical | Project | Viva |
|----------------------------------|--------|-----------|---------|-------|
| | Marks | Marks | Marks | Marks |
| NOS Total | 35 | 65 | - | - |









National Occupational Standards (NOS) Parameters

| NOS Code | ELE/N5901 |
|---------------------|--|
| NOS Name | Check site conditions, collect tools and raw materials |
| Sector | Electronics |
| Sub-Sector | Solar & LED |
| Occupation | Installation-S&L |
| NSQF Level | 4 |
| Credits | 7 |
| Version | 3.0 |
| Last Reviewed Date | 07/10/2025 |
| Next Review Date | 07/10/2028 |
| NSQC Clearance Date | 07/10/2025 |









ELE/N5902: Install the Solar Panel

Description

This NOS unit is about mounting and installing the solar panel in the customer premises. It also includes connecting the solar panels with the inverters and ensuring the functioning of solar power system.

Scope

The scope covers the following:

- Understanding installation and material usage procedure
- Assessing mounting using smart accessories
- Identify the installation requirement
- Installing the panel
- Connecting the system and check for functioning
- Completing the work
- Following quality and safety procedures

Elements and Performance Criteria

Understanding installation and material usage procedure

To be competent, the user/individual on the job must be able to:

- **PC1.** understand the customer requirement on installation
- PC2. ensure that all appropriate materials are available during installation time
- **PC3.** ensure that the installation meets the local building rules and regulations
- **PC4.** ensure to disconnect PV module from any electric sources such as batteries, inverters, etc., before working on the module
- **PC5.** check that the module is defect free before installing
- **PC6.** ensure to take specified measures such as fire resistance, corrosion resistance for the module during installation

Assessing mounting using smart accessories

To be competent, the user/individual on the job must be able to:

PC7. understand the type of mounting and other accessories (Steel Mounting bolt, Module attachment and grounding clip, Module spacer, Anodized aluminum mounting foot, Integrated butyl tape sealant) required

Identify the installation requirement

To be competent, the user/individual on the job must be able to:

- **PC8.** assess the degree of inclination and angle of tilt of PV module for the specific area, locality or region to enable the system absorb maximum annual sunlight
- **PC9.** ensure that sunlight falls perpendicular to the PV module to absorb maximum energy
- **PC10.** ensure that panels are mounted in a place where there is no shade at any time of the year
- **PC11.** ensure that mounting is strong to withstand wind, rain, etc.
- **PC12.** ensure that any special construction requirement for mounting is done by following acceptable quality standards, especially, in rooftop installations









- **PC13.** use approved tools for mounting
- **PC14.** set the mounting fixture firmly at the desired location

Installing the panel

To be competent, the user/individual on the job must be able to:

- **PC15.** remove packaging of the solar panel carefully
- PC16. handle the panels carefully without damaging the material
- **PC17.** take safety measures and wear protection gear such as gloves to avoid shock / injuries while handling modules
- **PC18.** cover the module with opaque material while installing to avoid any current generation
- PC19. ensure that junction box in covered
- **PC20.** do not disturb or disassemble any part of the module part during installation
- PC21. take necessary precautions for fire resistance of modules
- PC22. use recommended material of solar cable and plugs for electrical connection
- **PC23.** install spare fuse to avoid any short circuits as per company policy
- **PC24.** mount the module on the fixture with the mounting rails using bolts and nuts
- **PC25.** ensure that the panels are mounted firmly

Connecting the system and check for functioning

To be competent, the user/individual on the job must be able to:

- **PC26.** use the recommended cables to connect multiple PV modules in combination to generate the desired voltage and current
- **PC27.** choose type of connection, i.e., series or parallel, as per design
- **PC28.** check the maximum system voltage as per the installation and follow adjustment measures accordingly to match output requirement
- **PC29.** ensure that the modules are grounded as specified
- **PC30.** connect the system and check its functioning
- **PC31.** escalate for any issues faced during the functioning of the system

Completing the work

To be competent, the user/individual on the job must be able to:

- **PC32.** remove all the tools, consumables used and clean the work area after completing the installation activity
- PC33. fill in the job completion form and get the signature of the customer
- PC34. inform customers about maintenance of solar panels and procedure of solar panels cleaning
- PC35. follow company standards in documentation of installation activities performed

Following quality and safety procedures

To be competent, the user/individual on the job must be able to:

- **PC36.** remove any metals or jewellery to avoid possibility of current shock during installation activity
- **PC37.** wear all safety gears such as work shoes, cotton gloves, goggles while carrying out installation activities
- PC38. take specified precautionary measures while handling electrical system
- PC39. keep work area clean and organised









- **PC40.** adhere to relevant health and safety standards
- **PC41.** dispose-off any waste materials in accordance with safe working practices and procedures
- **PC42.** Prepare the site for masonry work by marking layout, clearing debris, and leveling the surface for installation.
- **PC43.** Perform masonry work like drilling, grouting, and fixing mounting structures as per specifications.

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** Understand installation requirements based on customer needs, system design, and site regulations.
- **KU2.** Knowledge of material handling procedures including checking for defects, protection from fire/corrosion, and safe disconnection before installation.
- **KU3.** Familiarity with mounting accessories, approved tools, tilt angle, inclination, shading, and wind load considerations for solar panel installation.
- **KU4.** Awareness of correct electrical connections series/parallel configuration, grounding standards, and system voltage requirements
- KU5. Knowledge of safety, PPE usage, industry standards, and proper disposal of installation waste

Generic Skills (GS)

User/individual on the job needs to know how to:

- **GS1.** Skill in planning and preparing installation work by ensuring availability of proper materials, tools, and safety conditions.
- **GS2.** Ability to mount solar panels correctly by aligning tilt, avoiding shading, and ensuring mechanical strength and stability
- **GS3.** Competence in making safe and accurate electrical connections using recommended cables, plugs, and fuses as per design
- **GS4.** Ability to document installation activities, fill job completion forms, and communicate maintenance instructions to customers
- **GS5.** Follow standard workplace procedures including site organization, wearing PPE, safe tool handling, and reporting functional issues promptly









Assessment Criteria

| Assessment Criteria for Outcomes | Theory Marks | Practical Marks | Project Marks | Viva Marks |
|---|-----------------|--------------------|------------------|---------------|
| Understanding installation and material usage procedure | 4 | 11 | - | - |
| PC1. understand the customer requirement on installation | - | - | - | - |
| PC2. ensure that all appropriate materials are available during installation time | - | - | - | - |
| PC3. ensure that the installation meets the local building rules and regulations | - | - | - | - |
| PC4. ensure to disconnect PV module from any electric sources such as batteries, inverters, etc., before working on the module | - | - | - | - |
| PC5. check that the module is defect free before installing | - | - | - | - |
| PC6. ensure to take specified measures such as fire resistance, corrosion resistance for the module during installation | - | - | - | - |
| Assessing mounting using smart accessories | 1 | 2 | - | - |
| PC7. understand the type of mounting and other accessories (Steel Mounting bolt, Module attachment and grounding clip, Module spacer, Anodized aluminum mounting foot, Integrated butyl tape sealant) required | - | - | - | - |
| Identify the installation requirement | 7 | 12 | - | - |
| PC8. assess the degree of inclination and angle of tilt of PV module for the specific area, locality or region to enable the system absorb maximum annual sunlight | - | - | - | - |
| PC9. ensure that sunlight falls perpendicular to the PV module to absorb maximum energy | _ | - | _ | - |
| PC10. ensure that panels are mounted in a place where there is no shade at any time of the year | - | - | - | - |
| PC11. ensure that mounting is strong to withstand wind, rain, etc. | - | - | - | - |









| Assessment Criteria for Outcomes | Theory Marks | Practical Marks | Project Marks | Viva Marks |
|--|-----------------|--------------------|------------------|---------------|
| PC12. ensure that any special construction requirement for mounting is done by following acceptable quality standards, especially, in rooftop installations | - | - | - | - |
| PC13. use approved tools for mounting | - | - | - | - |
| PC14. set the mounting fixture firmly at the desired location | - | - | - | - |
| Installing the panel | 8 | 17 | - | - |
| PC15. remove packaging of the solar panel carefully | - | - | - | - |
| PC16. handle the panels carefully without damaging the material | - | - | - | - |
| PC17. take safety measures and wear protection gear such as gloves to avoid shock / injuries while handling modules | - | - | - | - |
| PC18. cover the module with opaque material while installing to avoid any current generation | - | - | - | - |
| PC19. ensure that junction box in covered | - | - | - | - |
| PC20. do not disturb or disassemble any part of the module part during installation | - | - | - | - |
| PC21. take necessary precautions for fire resistance of modules | - | - | - | - |
| PC22. use recommended material of solar cable and plugs for electrical connection | - | - | - | - |
| PC23. install spare fuse to avoid any short circuits as per company policy | - | - | - | - |
| PC24. mount the module on the fixture with the mounting rails using bolts and nuts | - | - | - | - |
| PC25. ensure that the panels are mounted firmly | - | - | - | - |
| Connecting the system and check for functioning | 5 | 10 | - | - |









| Assessment Criteria for Outcomes | Theory Marks | Practical Marks | Project Marks | Viva Marks |
|--|-----------------|--------------------|------------------|---------------|
| PC26. use the recommended cables to connect multiple PV modules in combination to generate the desired voltage and current | - | - | - | - |
| PC27. choose type of connection, i.e., series or parallel, as per design | - | - | - | - |
| PC28. check the maximum system voltage as per the installation and follow adjustment measures accordingly to match output requirement | - | - | - | - |
| PC29. ensure that the modules are grounded as specified | - | - | - | - |
| PC30. connect the system and check its functioning | - | - | - | - |
| PC31. escalate for any issues faced during the functioning of the system | - | - | - | - |
| Completing the work | 4 | 5 | - | - |
| PC32. remove all the tools, consumables used and clean the work area after completing the installation activity | - | - | - | - |
| PC33. fill in the job completion form and get the signature of the customer | - | - | - | - |
| PC34. inform customers about maintenance of solar panels and procedure of solar panels cleaning | - | - | - | - |
| PC35. follow company standards in documentation of installation activities performed | - | - | - | - |
| Following quality and safety procedures | 6 | 8 | - | - |
| PC36. remove any metals or jewellery to avoid possibility of current shock during installation activity | - | - | - | - |
| PC37. wear all safety gears such as work shoes, cotton gloves, goggles while carrying out installation activities | - | - | - | - |
| PC38. take specified precautionary measures while handling electrical system | - | - | - | - |









| Assessment Criteria for Outcomes | Theory Marks | Practical Marks | Project Marks | Viva Marks |
|---|-----------------|--------------------|------------------|---------------|
| PC39. keep work area clean and organised | - | - | - | - |
| PC40. adhere to relevant health and safety standards | - | - | - | - |
| PC41. dispose-off any waste materials in accordance with safe working practices and procedures | - | - | - | - |
| PC42. Prepare the site for masonry work by marking layout, clearing debris, and leveling the surface for installation. | - | - | - | - |
| PC43. Perform masonry work like drilling, grouting, and fixing mounting structures as per specifications. | - | - | - | - |
| NOS Total | 35 | 65 | - | - |









National Occupational Standards (NOS) Parameters

| NOS Code | ELE/N5902 |
|---------------------|-------------------------|
| NOS Name | Install the Solar Panel |
| Sector | Electronics |
| Sub-Sector | Solar & LED |
| Occupation | Installation-S&L |
| NSQF Level | 4 |
| Credits | 8 |
| Version | 4.0 |
| Last Reviewed Date | 07/10/2025 |
| Next Review Date | 07/10/2028 |
| NSQC Clearance Date | 07/10/2025 |









DGT/VSQ/N0101: Employability Skills (30 Hours)

Description

This unit is about employability skills, Constitutional values, becoming a professional in the 21st Century, digital, financial, and legal literacy, diversity and Inclusion, English and communication skills, customer service, entrepreneurship, and apprenticeship, getting ready for jobs and career development.

Scope

The scope covers the following:

- Introduction to Employability Skills
- Constitutional values Citizenship
- Becoming a Professional in the 21st Century
- Basic English Skills
- Communication Skills
- Diversity & Inclusion
- Financial and Legal Literacy
- Essential Digital Skills
- Entrepreneurship
- Customer Service
- Getting ready for Apprenticeship & Jobs

Elements and Performance Criteria

Introduction to Employability Skills

To be competent, the user/individual on the job must be able to:

PC1. understand the significance of employability skills in meeting the job requirements

Constitutional values - Citizenship

To be competent, the user/individual on the job must be able to:

PC2. identify constitutional values, civic rights, duties, personal values and ethics and environmentally sustainable practices

Becoming a Professional in the 21st Century

To be competent, the user/individual on the job must be able to:

PC3. explain 21st Century Skills such as Self-Awareness, Behavior Skills, Positive attitude, self-motivation, problem-solving, creative thinking, time management, social and cultural awareness, emotional awareness, continuous learning mindset etc.

Basic English Skills

To be competent, the user/individual on the job must be able to:

PC4. speak with others using some basic English phrases or sentences

Communication Skills

To be competent, the user/individual on the job must be able to:

PC5. follow good manners while communicating with others

PC6. work with others in a team









Diversity & Inclusion

To be competent, the user/individual on the job must be able to:

- **PC7.** communicate and behave appropriately with all genders and PwD
- **PC8.** report any issues related to sexual harassment

Financial and Legal Literacy

To be competent, the user/individual on the job must be able to:

- **PC9.** use various financial products and services safely and securely
- **PC10.** calculate income, expenses, savings etc.
- **PC11.** approach the concerned authorities for any exploitation as per legal rights and laws

Essential Digital Skills

To be competent, the user/individual on the job must be able to:

- PC12. operate digital devices and use its features and applications securely and safely
- **PC13.** use internet and social media platforms securely and safely

Entrepreneurship

To be competent, the user/individual on the job must be able to:

- PC14. identify and assess opportunities for potential business
- PC15. identify sources for arranging money and associated financial and legal challenges

Customer Service

To be competent, the user/individual on the job must be able to:

- **PC16.** identify different types of customers
- **PC17.** identify customer needs and address them appropriately
- **PC18.** follow appropriate hygiene and grooming standards

Getting ready for apprenticeship & Jobs

To be competent, the user/individual on the job must be able to:

- PC19. create a basic biodata
- **PC20.** search for suitable jobs and apply
- PC21. identify and register apprenticeship opportunities as per requirement

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** need for employability skills
- **KU2.** various constitutional and personal values
- **KU3.** different environmentally sustainable practices and their importance
- **KU4.** Twenty first (21st) century skills and their importance
- **KU5.** how to use basic spoken English language
- **KU6.** Do and dont of effective communication
- **KU7.** inclusivity and its importance
- KU8. different types of disabilities and appropriate communication and behaviour towards PwD
- **KU9.** different types of financial products and services









- **KU10.** how to compute income and expenses
- **KU11.** importance of maintaining safety and security in financial transactions
- **KU12.** different legal rights and laws
- **KU13.** how to operate digital devices and applications safely and securely
- KU14. ways to identify business opportunities
- KU15. types of customers and their needs
- **KU16.** how to apply for a job and prepare for an interview
- **KU17.** apprenticeship scheme and the process of registering on apprenticeship portal

Generic Skills (GS)

User/individual on the job needs to know how to:

- **GS1.** communicate effectively using appropriate language
- GS2. behave politely and appropriately with all
- **GS3.** perform basic calculations
- **GS4.** solve problems effectively
- **GS5.** be careful and attentive at work
- **GS6.** use time effectively
- **GS7.** maintain hygiene and sanitisation to avoid infection









Assessment Criteria

| Assessment Criteria for Outcomes | Theory Marks | Practical Marks | Project Marks | Viva Marks |
|--|-----------------|--------------------|------------------|---------------|
| Introduction to Employability Skills | 1 | 1 | - | - |
| PC1. understand the significance of employability skills in meeting the job requirements | - | - | - | - |
| Constitutional values - Citizenship | 1 | 1 | - | - |
| PC2. identify constitutional values, civic rights, duties, personal values and ethics and environmentally sustainable practices | - | - | - | - |
| Becoming a Professional in the 21st Century | 1 | 3 | - | - |
| PC3. explain 21st Century Skills such as Self-Awareness, Behavior Skills, Positive attitude, self-motivation, problem-solving, creative thinking, time management, social and cultural awareness, emotional awareness, continuous learning mindset etc. | - | - | - | - |
| Basic English Skills | 2 | 3 | - | - |
| PC4. speak with others using some basic English phrases or sentences | - | - | - | - |
| Communication Skills | 1 | 1 | - | - |
| PC5. follow good manners while communicating with others | - | - | - | - |
| PC6. work with others in a team | - | - | - | - |
| Diversity & Inclusion | 1 | 1 | - | - |
| PC7. communicate and behave appropriately with all genders and PwD | - | - | - | - |
| PC8. report any issues related to sexual harassment | - | - | - | - |
| Financial and Legal Literacy | 3 | 4 | - | - |
| PC9. use various financial products and services safely and securely | - | - | - | - |









| Assessment Criteria for Outcomes | Theory Marks | Practical Marks | Project Marks | Viva Marks |
|---|-----------------|--------------------|------------------|---------------|
| PC10. calculate income, expenses, savings etc. | - | - | - | - |
| PC11. approach the concerned authorities for any exploitation as per legal rights and laws | - | - | - | - |
| Essential Digital Skills | 4 | 6 | - | - |
| PC12. operate digital devices and use its features and applications securely and safely | - | - | - | - |
| PC13. use internet and social media platforms securely and safely | - | - | - | - |
| Entrepreneurship | 3 | 5 | - | - |
| PC14. identify and assess opportunities for potential business | - | - | - | - |
| PC15. identify sources for arranging money and associated financial and legal challenges | - | - | - | - |
| Customer Service | 2 | 2 | - | - |
| PC16. identify different types of customers | - | - | - | - |
| PC17. identify customer needs and address them appropriately | - | - | - | - |
| PC18. follow appropriate hygiene and grooming standards | - | - | - | - |
| Getting ready for apprenticeship & Jobs | 1 | 3 | - | - |
| PC19. create a basic biodata | - | - | - | - |
| PC20. search for suitable jobs and apply | - | - | - | - |
| PC21. identify and register apprenticeship opportunities as per requirement | - | - | - | - |
| NOS Total | 20 | 30 | - | - |









National Occupational Standards (NOS) Parameters

| NOS Code | DGT/VSQ/N0101 |
|---------------------|---------------------------------|
| NOS Name | Employability Skills (30 Hours) |
| Sector | Cross Sectoral |
| Sub-Sector | Professional Skills |
| Occupation | Employability |
| NSQF Level | 2 |
| Credits | 1 |
| Version | 1.0 |
| Last Reviewed Date | 07/10/2025 |
| Next Review Date | 07/10/2028 |
| NSQC Clearance Date | 07/10/2025 |

Assessment Guidelines and Assessment Weightage

Assessment Guidelines

- 1. Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Skills Practical for each PC.
- 2. The assessment for the theory part will be based on knowledge bank of questions created by the SSC.
- 3. Assessment will be conducted for all compulsory NOS, and where applicable, on the selected elective/option NOS/set of NOS.
- 4. Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training centre (as per assessment criteria below).
- 5. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training centre based on this criterion.
- 6. To pass the Qualification Pack, every trainee should score a minimum of 70% of aggregate marks to successfully clear the assessment.
- 7. In case of unsuccessful completion, the trainee may seek reassessment on the Qualification Pack.









Minimum Aggregate Passing % at QP Level: 70

(**Please note**: Every Trainee should score a minimum aggregate passing percentage as specified above, to successfully clear the Qualification Pack assessment.)

Assessment Weightage

Compulsory NOS

| National Occupational Standards | Theory Marks | Practical Marks | Project Marks | Viva Marks | Total Marks | Weightage |
|--|-----------------|--------------------|------------------|---------------|----------------|-----------|
| ELE/N5901.Check site conditions, collect tools and raw materials | 35 | 65 | - | - | 100 | 40 |
| ELE/N5902.Install the Solar Panel | 35 | 65 | - | - | 100 | 40 |
| DGT/VSQ/N0101.Employability Skills (30 Hours) | 20 | 30 | - | - | 50 | 20 |
| Total | 90 | 160 | - | - | 250 | 100 |









Acronyms

| NOS | National Occupational Standard(s) |
|------|---|
| NSQF | National Skills Qualifications Framework |
| QP | Qualifications Pack |
| TVET | Technical and Vocational Education and Training |









Glossary

| Sector | Sector is a conglomeration of different business operations having similar business and interests. It may also be defined as a distinct subset of the economy whose components share similar characteristics and interests. |
|---|--|
| Sub-sector | Sub-sector is derived from a further breakdown based on the characteristics and interests of its components. |
| Occupation | Occupation is a set of job roles, which perform similar/ related set of functions in an industry. |
| Job role | Job role defines a unique set of functions that together form a unique employment opportunity in an organisation. |
| Occupational Standards (OS) | OS specify the standards of performance an individual must achieve when carrying out a function in the workplace, together with the Knowledge and Understanding (KU) they need to meet that standard consistently. Occupational Standards are applicable both in the Indian and global contexts. |
| Performance Criteria (PC) | Performance Criteria (PC) are statements that together specify the standard of performance required when carrying out a task. |
| National Occupational Standards (NOS) | NOS are occupational standards which apply uniquely in the Indian context. |
| Qualifications Pack (QP) | QP comprises the set of OS, together with the educational, training and other criteria required to perform a job role. A QP is assigned a unique qualifications pack code. |
| Unit Code | Unit code is a unique identifier for an Occupational Standard, which is denoted by an 'N' |
| Unit Title | Unit title gives a clear overall statement about what the incumbent should be able to do. |
| Description | Description gives a short summary of the unit content. This would be helpful to anyone searching on a database to verify that this is the appropriate OS they are looking for. |
| Scope | Scope is a set of statements specifying the range of variables that an individual may have to deal with in carrying out the function which have a critical impact on quality of performance required. |









| Knowledge and Understanding (KU) | Knowledge and Understanding (KU) are statements which together specify the technical, generic, professional and organisational specific knowledge that an individual needs in order to perform to the required standard. |
|-------------------------------------|--|
| Organisational Context | Organisational context includes the way the organisation is structured and how it operates, including the extent of operative knowledge managers have of their relevant areas of responsibility. |
| Technical Knowledge | Technical knowledge is the specific knowledge needed to accomplish specific designated responsibilities. |
| Core Skills/ Generic Skills (GS) | Core skills or Generic Skills (GS) are a group of skills that are the key to learning and working in today's world. These skills are typically needed in any work environment in today's world. These skills are typically needed in any work environment. In the context of the OS, these include communication related skills that are applicable to most job roles. |
| Electives | Electives are NOS/set of NOS that are identified by the sector as contributive to specialization in a job role. There may be multiple electives within a QP for each specialized job role. Trainees must select at least one elective for the successful completion of a QP with Electives. |
| Options | Options are NOS/set of NOS that are identified by the sector as additional skills. There may be multiple options within a QP. It is not mandatory to select any of the options to complete a QP with Options. |