









Construction Fitter

QP Code: CON/Q1205

Version: 3.0

NSQF Level: 3.5

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CON/Q1205: Construction Fitter

Brief Job Description

A Construction Fitter is responsible for conducting fit-up operation on structural steel elements or assemblies as per requirements.

Personal Attributes

The individual should be physically fit with the ability to work in varying locations and environmental conditions. The person should be able to work within a team possess appropriate verbal and written communication skills.

Applicable National Occupational Standards (NOS)

Compulsory NOS:

- 1. CON/N1208: Carry out marking on structural steel elements for fit-up
- 2. CON/N1209: Perform the fit-up of assemblies
- 3. CON/N8001: Work effectively in a team to deliver desired results at the workplace

4. <u>CON/N9001</u>: Work according to personal health, safety and environment protocols at construction <u>site</u>

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

Qualification Pack (QP) Parameters

Sector	Construction
Sub-Sector	Real Estate and Infrastructure construction
Occupation	Fabrication
Country	India
NSQF Level	3.5
Credits	12
Aligned to NCO/ISCO/ISIC Code	NCO-2015/7214.0800









Minimum Educational Qualification & Experience	 11th grade pass OR Completed 1st year of 3-year diploma (after 10th) and pursuing regular diploma OR 10th grade pass and pursuing continuous schooling OR 8th grade pass with 3 Years of experience in the relevant field OR Previous relevant Qualification of NSQF Level (2.5) with 3 Years of experience in the relevant field OR Previous relevant Qualification of NSQF Level (3 with 1.5 Years of experience in the relevant field)
Minimum Level of Education for Training in School	10th Class
Pre-Requisite License or Training	NA
Minimum Job Entry Age	18 Years
Last Reviewed On	NA
Next Review Date	31/08/2026
NSQC Approval Date	31/08/2023
Version	3.0
Reference code on NQR	QG-3.5-CO-00798-2023-V2-CSDCI
NQR Version	1







CON/N1208: Carry out marking on structural steel elements for fit-up

Description

This unit is about marking structural steel elements and assemblies for completing fit-up operations in accordance with shop drawings

Scope

The scope covers the following :

- Compute the dimensions of assemblies or components
- Select the correct workpieces
- Make markings on workpieces

Elements and Performance Criteria

Compute the dimensions of assemblies or components

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

- **PC1.** determine the proper drawing and section therein in accordance with the nee
- **PC2.** use linear calculations to calculate the necessary section dimensions and note the orientation of sections
- **PC3.** explain the job requirements to subordinates by hand-sketching a simplified version of the drawing

Select the correct workpieces

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

- PC4. identify the correct material based on its dimension by referring to the relevant drawing
- **PC5.** measure the dimensions of the identified material to check its compliance with the jobs
- **PC6.** inspect the workpiece for beveling, scalloping, and other preparations

Make markings on workpieces

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

- **PC7.** clean the section's surface thoroughly to remove any debris, paint, oil, rust, etc.
- **PC8.** identify the location to begin measuring and marking the dimensions on the section in accordance with the drawing
- **PC9.** use the appropriate measuring and marking tools and instruments, measuring tape, scribers, etc.
- **PC10.** mark external surfaces of sections with precise marks that are easy to recognize

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. the technical nomenclature concerning the assemblies under fabrication how to read the correct dimensions from the sectional drawings and interpret the required parameters, such as dimension of sections









- **KU2.** the orientation of section in terms of edge preparation
- KU3. different symbols on the drawing sheet and their correct interpretations
- KU4. identify material based on shape, dimension and grade
- KU5. the basics of arithmetic and geometry
- **KU6.** other procedures involved in fabrication, such as gas cutting, use of heating torch, grinding, etc.
- KU7. different types of portable and installed grinders, and their applications
- **KU8.** different types of blades available in the market
- **KU9.** the process of drilling and various equipment used in grinding work
- KU10. different methods of cutting a metal section, such as shearing
- **KU11.** the process of installing bolts
- KU12. the importance of washers and torque requirements
- KU13. the procedure of installing rivets and different equipment used in the process
- **KU14.** the correct method to be followed to straighten or bend different types of sections or plates
- **KU15.** the selection criteria for different marking instruments based on the surface and other requirements
- **KU16.** the selection and use of different measuring instruments and tools based on the work requirements
- KU17. the correct procedure for measuring and marking the sections

Generic Skills (GS)

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

- **GS1.** maintain the appropriate data and records
- **GS2.** read the appropriate reports and literature concerning the field of work
- GS3. communicate professionally with all the stakeholders
- **GS4.** listen attentively to understand the information/ instructions being shared and take appropriate action
- GS5. coordinate with the co-workers to achieve the work objectives
- **GS6.** identify possible disruptions to work and take appropriate mitigation measures
- GS7. take prompt action to deal with workplace emergencies and accidents
- GS8. evaluate all possible solutions to work-related problems and select the best one
- **GS9.** follow the recommended practices for the timely completion of work and achievement of organizational objectives







Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Compute the dimensions of assemblies or components</i>	9	18	-	3
PC1. determine the proper drawing and section therein in accordance with the nee	-	-	-	-
PC2. use linear calculations to calculate the necessary section dimensions and note the orientation of sections	-	-	-	-
PC3. explain the job requirements to subordinates by hand-sketching a simplified version of the drawing	_	_	-	_
Select the correct workpieces	9	18	-	3
PC4. identify the correct material based on its dimension by referring to the relevant drawing	-	-	-	-
PC5. measure the dimensions of the identified material to check its compliance with the jobs	-	-	-	-
PC6. inspect the workpiece for beveling, scalloping, and other preparations	-	-	-	-
Make markings on workpieces	12	24	-	4
PC7. clean the section's surface thoroughly to remove any debris, paint, oil, rust, etc.	-	-	-	-
PC8. identify the location to begin measuring and marking the dimensions on the section in accordance with the drawing	-	_	-	-
PC9. use the appropriate measuring and marking tools and instruments, measuring tape, scribers, etc.	-	-	-	-
PC10. mark external surfaces of sections with precise marks that are easy to recognize	-	-	-	-
NOS Total	30	60	-	10







National Occupational Standards (NOS) Parameters

NOS Code	CON/N1208
NOS Name	Carry out marking on structural steel elements for fit-up
Sector	Construction
Sub-Sector	Real Estate and Infrastructure construction
Occupation	Fabrication
NSQF Level	3.5
Credits	5
Version	3.0
Last Reviewed Date	31/08/2023
Next Review Date	31/08/2026
NSQC Clearance Date	31/08/2023







CON/N1209: Perform the fit-up of assemblies

Description

This unit is about performing the fit-up of assemblies during fabrication

Scope

The scope covers the following :

- Place and fix the components as per marking
- Carry out necessary adjustments
- Repair any defects found in the components

Elements and Performance Criteria

Place and fix the components as per marking

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

- **PC1.** estimate the required number of fixtures such as clamps etc., for completing the assigned task
- PC2. identify the locations and position for erecting temporary supports and anchors
- PC3. erect temporary support and anchors at the identified locations as per the work requirement
- **PC4.** check the fixtures to ensure they are in working condition
- PC5. inspect the fabrication bed before commencing the fit-up
- PC6. estimate the scope of grinders and gas cutters for completing the job
- **PC7.** determine the orientation of components as shown in the drawings
- **PC8.** assist in lowering, anchoring and placing heavy sections at the appropriate location as per the work requirement
- PC9. ensure that proper root gap is maintained throughout the assembly for welded connections
- **PC10.** assist in the preparation of fabrication bed and other fitting activities such as placing and tightening the clamps, jacking and striking, etc

Carry out necessary adjustments

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

- PC11. identify any defects in positioning of components in reference to the markings
- **PC12.** carry out operations such as striking, realignment, etc. for accurate positioning of structural components
- **PC13.** identify locations for tack welding, ensuring consistent root gap is maintained and the joint is stable
- **PC14.** determine the requirement for preheating by consulting the supervisor
- PC15. check the finishing of tack weld carried out by grinder, and the finishing of surface
- PC16. examine the tack weld to ensure no defects in welding
- **PC17.** check the dimensions after tack welding to ensure that change due to shrinkage is within the prescribed tolerance limit







- **PC18.** identify rectification/ repair needs through coordination with the supervisor and carry out the required rectification/ repair
- PC19. check the accuracy of positioning of sections
- PC20. assist the foreman in the preparation of fit-up report

Repair any defects found in the components

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

- PC21. straighten and bend sections as required
- **PC22.** identify and correct distortions applying the appropriate method, e.g. application of heat or force, or the combination of both
- PC23. utilize vice or jack to remove distortion

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** how to estimate the requirements of fit-up, e.g. the space required for completing the fit-up work the number of clamps and fixture required for restricting the movement of sections, etc.
- KU2. the requirement of erecting temporary supports and anchorages for fit-up
- KU3. how to check the workability of clamps and fixtures
- KU4. the ideal conditions for an anchor point
- KU5. how to decide the anchor points
- **KU6.** the need and importance of tack welding
- KU7. how to identify the location of tack welding
- KU8. the importance of preparing fabrication platform or bed
- KU9. the meaning and requirement of root gap
- KU10. different methods and process for making connections in metal sections
- **KU11.** how to place and position sections of different shapes, dimensions, etc
- **KU12.** how to align the sections as per the markings
- **KU13.** different types of jacks (based on mechanics, principle of functioning, capacity), their application and use
- KU14. how to use different jacks, vices, clamps and other fixtures
- KU15. use of different equipment for load lifting and shifting
- KU16. the visual inspection of weld to check cracks, undercut, spatters, etc
- KU17. the meaning causes and physical effects of distortion
- KU18. the procedures employed to correct distortion (application of heat and force)
- KU19. the process of bending plates or sections using bending machines
- KU20. the types of bending machines, their application and limitations

Generic Skills (GS)

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









- **GS1.** maintain the appropriate data and records
- **GS2.** read the appropriate reports and literature concerning the field of work
- **GS3.** communicate professionally with all the stakeholders
- **GS4.** listen attentively to understand the information/ instructions being shared and take appropriate action
- GS5. coordinate with the co-workers to achieve the work objectives
- GS6. identify possible disruptions to work and take appropriate mitigation measures
- GS7. take prompt action to deal with workplace emergencies and accidents
- GS8. evaluate all possible solutions to work-related problems and select the best one
- **GS9.** follow the recommended practices for the timely completion of work and achievement of organizational objectives







Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Place and fix the components as per marking	13	26	-	4
PC1. estimate the required number of fixtures such as clamps etc., for completing the assigned task	-	-	-	-
PC2. identify the locations and position for erecting temporary supports and anchors	-	-	-	-
PC3. erect temporary support and anchors at the identified locations as per the work requirement	-	-	-	-
PC4. check the fixtures to ensure they are in working condition	-	-	-	-
PC5. inspect the fabrication bed before commencing the fit-up	-	-	-	-
PC6. estimate the scope of grinders and gas cutters for completing the job	-	-	-	-
PC7. determine the orientation of components as shown in the drawings	-	-	-	-
PC8. assist in lowering, anchoring and placing heavy sections at the appropriate location as per the work requirement	-	-	-	-
PC9. ensure that proper root gap is maintained throughout the assembly for welded connections	-	-	-	-
PC10. assist in the preparation of fabrication bed and other fitting activities such as placing and tightening the clamps, jacking and striking, etc	-	-	-	-
Carry out necessary adjustments	13	26	-	4
PC11. identify any defects in positioning of components in reference to the markings	-	-	-	-
PC12. carry out operations such as striking, realignment, etc. for accurate positioning of structural components	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC13. identify locations for tack welding, ensuring consistent root gap is maintained and the joint is stable	-	-	-	-
PC14. determine the requirement for preheating by consulting the supervisor	_	-	-	-
PC15. check the finishing of tack weld carried out by grinder, and the finishing of surface	-	-	-	-
PC16. examine the tack weld to ensure no defects in welding	_	-	-	-
PC17. check the dimensions after tack welding to ensure that change due to shrinkage is within the prescribed tolerance limit	_	-	-	-
PC18. identify rectification/ repair needs through coordination with the supervisor and carry out the required rectification/ repair	-	-	-	-
PC19. check the accuracy of positioning of sections	-	-	-	-
PC20. assist the foreman in the preparation of fit- up report	-	-	-	-
Repair any defects found in the components	4	8	-	2
PC21. straighten and bend sections as required	-	-	-	-
PC22. identify and correct distortions applying the appropriate method, e.g. application of heat or force, or the combination of both	-	-	-	-
PC23. utilize vice or jack to remove distortion	-	-	-	-
NOS Total	30	60	-	10









National Occupational Standards (NOS) Parameters

NOS Code	CON/N1209
NOS Name	Perform the fit-up of assemblies
Sector	Construction
Sub-Sector	Real Estate and Infrastructure construction
Occupation	Fabrication
NSQF Level	3.5
Credits	4
Version	3.0
Last Reviewed Date	31/08/2023
Next Review Date	31/08/2026
NSQC Clearance Date	31/08/2023







CON/N8001: Work effectively in a team to deliver desired results at the workplace

Description

This unit describes the skills and knowledge required to work effectively within a team to achieve the desired results

Scope

The scope covers the following :

- Interact and communicate in an effective manner
- Support co-workers to execute the project requirements
- Practice inclusion

Elements and Performance Criteria

Interact and communicate in an effective manner

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

- PC1. pass on work related information/ requirement clearly to the team members
- PC2. inform co-workers and superiors about any kind of deviations from work
- PC3. report any unresolved problem to the supervisor immediately
- PC4. obtain instructions from superiors and respond on the same
- PC5. communicate to team members/subordinates for appropriate work technique and method
- PC6. seek clarification and advice as per the requirement

Support co-workers to execute the project requirements

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

- **PC7.** hand over the required material, tools, tackles, equipment and work fronts timely to interfacing teams
- PC8. work together with co-workers in a synchronized manner

Practice inclusion

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

- PC9. maintain cultural inclusivity at work place
- PC10. maintain disability friendly work practices
- PC11. follow gender neutral practices at workplace
- **PC12.** address discriminatory and offensive behaviour in a professional manner as per organizational policy

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

KU1. own roles and responsibilities









- KU2. importance of effective communication
- **KU3.** the consequence of poor teamwork on project outcomes, timelines, safety at the construction site, etc.
- KU4. different modes of communication used at workplace
- **KU5.** importance of creating healthy and cooperative work environment among the gangs of workers
- KU6. different activities within the work area where interaction with other workers is required
- **KU7.** applicable techniques of work, properties of materials used, tools and tackles used, safety standards that co-workers might need as per the requirement
- **KU8.** importance of proper and effective communication and the expected adverse effects in case of failure relating to quality, timeliness, safety, risks at the construction project site
- **KU9.** importance and need of supporting co-workers facing problems for the smooth functioning of work
- KU10. the fundamental concept of gender equality
- KU11. how to recognise and be sensitive to issues of disability, culture and gender
- **KU12.** legislation, policies, and procedures relating to gender sensitivity and cultural diversity including their impact on the area of operation

Generic Skills (GS)

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

- **GS1.** write in at least one language, preferably in the local language of the site
- **GS2.** read the communication regarding work completion, materials used, tools and tackles used, the resource required, etc,
- GS3. speak in one or more languages, preferably in one of the local language of the site
- **GS4.** listen and follow instructions / communication shared by superiors/ co-workers regarding team requirements or interfaces during work processes
- **GS5.** communicate orally and effectively with co-workers considering their educational and social background
- **GS6.** decide on what information is to be shared with co-workers within the team or to the interfacing gang of workers
- **GS7.** plan work and organize the required resources in coordination with team members
- **GS8.** complete all assigned task in coordination with team members
- **GS9.** take initiative in resolving issues among co-workers or report the same to superiors
- GS10. ensure best ways of coordination among team members
- **GS11.** evaluate the complexity of task and determine if any guidance is required from superiors







Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Interact and communicate in an effective manner	18	42	-	-
PC1. pass on work related information/ requirement clearly to the team members	-	-	-	-
PC2. inform co-workers and superiors about any kind of deviations from work	-	-	-	-
PC3. report any unresolved problem to the supervisor immediately	-	-	-	-
PC4. obtain instructions from superiors and respond on the same	-	-	-	-
PC5. communicate to team members/subordinates for appropriate work technique and method	-	-	-	-
PC6. seek clarification and advice as per the requirement	-	-	-	-
Support co-workers to execute the project requirements	6	14	-	-
PC7. hand over the required material, tools, tackles, equipment and work fronts timely to interfacing teams	-	-	-	-
PC8. work together with co-workers in a synchronized manner	-	-	-	-
Practice inclusion	6	14	-	-
PC9. maintain cultural inclusivity at work place	-	-	-	-
PC10. maintain disability friendly work practices	-	-	-	-
PC11. follow gender neutral practices at workplace	-	-	-	-
PC12. address discriminatory and offensive behaviour in a professional manner as per organizational policy	-	-	-	-
NOS Total	30	70	-	-







National Occupational Standards (NOS) Parameters

NOS Code	CON/N8001
NOS Name	Work effectively in a team to deliver desired results at the workplace
Sector	Construction
Sub-Sector	Real Estate and Infrastructure construction
Occupation	Generic 2
NSQF Level	4
Credits	1
Version	12.0
Last Reviewed Date	31/08/2023
Next Review Date	31/08/2026
NSQC Clearance Date	31/08/2023







CON/N9001: Work according to personal health, safety and environment protocols at construction site

Description

This NOS covers the skill and knowledge required for an individual to work according to personal health, safety and environmental protocols at construction site

Scope

The scope covers the following :

- Follow safety norms as defined by organization
- Adopt healthy & safe work practices
- Implement good housekeeping and environment protection process and activities
- Follow infection control guidelines as per applicability

Elements and Performance Criteria

Follow safety norms as defined by the organization

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

- PC1. identify and report any hazards, risks or breaches in site safety to the appropriate authority
- **PC2.** follow emergency and evacuation procedures in case of accidents, fires, natural calamities
- **PC3.** follow recommended safe practices in handling construction materials, including chemical and hazardous material whenever applicable
- **PC4.** follow all the protocols and safety techniques conveyed during safety awareness programs like Tool Box Talks, safety demonstrations and mock drills conducted at the site
- **PC5.** select and operate different types of fire extinguishers corresponding to various types of fires as per EHS guideline
- PC6. identify near miss, unsafe condition and unsafe act

Adopt healthy & safe work practices

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

- **PC7.** use appropriate Personal Protective Equipment (PPE) as per work requirements for : Head Protection, Ear protection, Fall Protection ,Foot Protection, Face and Eye Protection, Hand and Body Protection , and Respiratory Protection (if required)
- PC8. handle all required tools, tackles, materials and equipment safely
- PC9. follow safe disposal of waste, harmful and hazardous materials as per EHS guidelines
- PC10. check and install all safety equipment as per standard guidelines
- PC11. follow safety protocols and practices as laid down by site EHS department
- PC12. obtain "height pass" clearance for working at heights

Implement good housekeeping practices

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

PC13. collect, segregate and deposit construction waste into appropriate containers based on their toxicity or hazardous nature









PC14. apply ergonomic principles wherever required

Follow infection control guidelines as per applicability

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

- PC15. follow recommended personal hygiene, workplace hygiene and sanitization practices
- PC16. clean and disinfect all materials, tools and supplies before and after use
- **PC17.** report immediately to concerned authorities regarding signs and symptoms of illness of self and others

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- **KU1.** reporting procedures in cases of breaches or hazards for site safety, accidents, and emergency situations as per guidelines
- **KU2.** types of safety hazards at construction sites
- KU3. basic ergonomic principles as per applicability
- **KU4.** the procedure for responding to accidents and other emergencies at site
- KU5. use of appropriate personal protective equipment based on various working conditions
- **KU6.** importance of handling tools, equipment, and materials as per applicable norms
- KU7. effect of construction material on health and environments as per applicability
- **KU8.** various environmental protection methods as per applicability
- **KU9.** storage of waste including non-combustible scrap material and debris, combustible scrap material and debris, general construction waste and trash (non-toxic, non-hazardous), any other hazardous wastes and any other flammable wastes at the appropriate location
- KU10. how to keep the workplace neat and tidy so as to be safe
- **KU11.** how to use hazardous material in a safe and appropriate manner as per applicability
- KU12. types of fire
- KU13. procedure of operating different types of fire extinguishers
- KU14. safety relevant to tools, tackles, and equipment as per applicability
- **KU15.** housekeeping activities relevant to task
- KU16. ways of transmission of infection
- KU17. ways to manage infectious risks at the workplace
- KU18. different methods of cleaning, disinfection, sterilization, and sanitization
- KU19. symptoms of infection like fever, cough, redness, swelling, and inflammation

Generic Skills (GS)

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

- GS1. write in at least one language, preferably in the local language of the site
- **GS2.** fill safety formats for near miss, unsafe conditions and safety suggestions
- **GS3.** read in one or more language, preferably in the local language of the site







- GS4. speak in one or more language, preferably in one of the local language of the site
- **GS5.** listen to instructions/communication shared by site EHS and superiors regarding site safety, and conducting the toolbox talk
- **GS6.** identify potential safety risks and report to the appropriate authority
- **GS7.** assess and analyze areas which may affect health, safety and environment protocol on the site







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Qualification Pack

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Follow safety norms as defined by the organization	6	14	-	-
PC1. identify and report any hazards, risks or breaches in site safety to the appropriate authority	-	-	-	-
PC2. follow emergency and evacuation procedures in case of accidents, fires, natural calamities	-	-	-	-
PC3. follow recommended safe practices in handling construction materials, including chemical and hazardous material whenever applicable	-	-	-	-
PC4. follow all the protocols and safety techniques conveyed during safety awareness programs like Tool Box Talks, safety demonstrations and mock drills conducted at the site	-	-	-	-
PC5. select and operate different types of fire extinguishers corresponding to various types of fires as per EHS guideline	-	-	-	-
PC6. identify near miss, unsafe condition and unsafe act	-	-	-	-
Adopt healthy & safe work practices	15	35	-	-
PC7. use appropriate Personal Protective Equipment (PPE) as per work requirements for : Head Protection, Ear protection, Fall Protection ,Foot Protection, Face and Eye Protection, Hand and Body Protection , and Respiratory Protection (if required)	-	_	-	-
PC8. handle all required tools, tackles, materials and equipment safely	_	-	_	-
PC9. follow safe disposal of waste, harmful and hazardous materials as per EHS guidelines	_	-	_	-
PC10. check and install all safety equipment as per standard guidelines	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC11. follow safety protocols and practices as laid down by site EHS department	-	-	-	-
PC12. obtain "height pass" clearance for working at heights	-	-	-	-
Implement good housekeeping practices	6	14	-	-
PC13. collect, segregate and deposit construction waste into appropriate containers based on their toxicity or hazardous nature	-	-	-	-
PC14. apply ergonomic principles wherever required	-	-	-	-
Follow infection control guidelines as per applicability	3	7	-	-
PC15. follow recommended personal hygiene, workplace hygiene and sanitization practices	-	-	-	-
PC16. clean and disinfect all materials, tools and supplies before and after use	-	-	-	-
PC17. report immediately to concerned authorities regarding signs and symptoms of illness of self and others	-	-	-	-
NOS Total	30	70	-	-







National Occupational Standards (NOS) Parameters

NOS Code	CON/N9001
NOS Name	Work according to personal health, safety and environment protocols at construction site
Sector	Construction
Sub-Sector	Real Estate and Infrastructure construction
Occupation	Generic Safety
NSQF Level	4
Credits	1
Version	10.0
Last Reviewed Date	31/08/2023
Next Review Date	31/08/2026
NSQC Clearance Date	31/08/2023







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, selfmotivation, 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	27/01/2022
Next Review Date	26/01/2025
NSQC Clearance Date	27/01/2022

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 knowledge part will be based on knowledge bank of questions created by Assessment Bodies subject to approval by SSC.

3. Individual assessment agencies will create unique question papers for knowledge/theory part for assessment of candidates as per assessment criteria given below.

4. Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training center based on assessment criteria.

5. The passing percentage for each QP will be 70%. To pass the Qualification Pack, every trainee should score a minimum of 70% individually in each NOS.

6. The Assessor shall check the final outcome of the practices while evaluating the steps performed to achieve the final outcome.







7. The trainee shall be provided with a chance to repeat the test to correct his procedures in case of improper performance, with a deduction of marks for each iteration.

8. After the certain number of iteration as decided by SSC the trainee is marked as fail, scoring zero marks for the procedure for the practical activity.

9. In case of successfully passing only certain number of NOS's, the trainee is eligible to take subsequent assessment on the balance NOS's to pass the Qualification Pack within the specified timeframe set by SSC.

10. Minimum duration of Assessment of each QP shall be of 4hrs/trainee.

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
CON/N1208.Carry out marking on structural steel elements for fit-up	30	60	0	10	100	45
CON/N1209.Perform the fit-up of assemblies	30	60	0	10	100	40
CON/N8001.Work effectively in a team to deliver desired results at the workplace	30	70	0	0	100	5
CON/N9001.Work according to personal health, safety and environment protocols at construction site	30	70	0	0	100	5
DGT/VSQ/N0101.Employability Skills (30 Hours)	20	30	_	_	50	5
Total	140	290	0	20	450	100







Acronyms

NOS	National Occupational Standard(s)
NSQF	National Skills Qualifications Framework
QP	Qualifications Pack
TVET	Technical and Vocational Education and Training
MCQ	Multiple Choice Question
EHS	Environment Health and Safety
PPE	Personal Protective Equipment







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.