



Qualification Pack



Rigger - Precast Erection

QP Code: CON/Q0703

Version: 3.0

NSQF Level: 3.5

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CON/Q0703: Rigger - Precast Erection

Brief Job Description

A Rigger - Precast Erection is responsible for providing support in heavy lifting, unloading and aligning RCC precast units and components by means of cranes or other heavy lifting equipment and applying specified grouting and caulking agents to the precast joints.

Personal Attributes

The individual should be physically fit to carry out labor-intensive work for long durations. The person should be able to work in a team environment and as per the given instructions. The individual should have appropriate verbal and written communication skills.

Applicable National Occupational Standards (NOS)

Compulsory NOS:

- [1. CON/N0709: Provide support in heavy lifting of precast units](#)
- [2. CON/N0710: Unload, position and align RCC precast components](#)
- [3. CON/N0711: Apply grout and caulking agents in RCC precast components](#)
- [4. CON/N8001: Work effectively in a team to deliver desired results at the workplace](#)
- [5. CON/N8002: Plan and organize work to meet expected outcomes](#)
- [6. CON/N9001: Work according to personal health, safety and environment protocols at construction site](#)
- [7. DGT/VSQ/N0101: Employability Skills \(30 Hours\)](#)

Qualification Pack (QP) Parameters

Sector	Construction
Sub-Sector	Real Estate and Infrastructure construction
Occupation	Rigging
Country	India
NSQF Level	3.5



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Credits	13
Aligned to NCO/ISCO/ISIC Code	NCO-2015/7215.0100
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-00813-2023-V2-CSDCI
NQR Version	1



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CON/N0709: Provide support in heavy lifting of precast units

Description

This occupational standards unit is about providing support in heavy lifting of precast units

Scope

The scope covers the following :

- Shift precast units
- Prepare for lifting precast units
- Provide support in heavy lifting work

Elements and Performance Criteria

Shift precast units

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

- PC1.** select and use the appropriate rigging gear for heavy material shifting for precast units
- PC2.** anchor precast units and hook up with the prescribed lifting equipment using slings, shackles, rope or lifting hooks and secure properly to prevent slipping or deflection
- PC3.** tie down the precast units to the transporting vehicle using chains, binders, belts etc., to stabilize the load and prevent damage during transportation
- PC4.** prepare the precast units for unloading, and remove the bracing, packing and protective edges from the units
- PC5.** check the precast units for chipped edges, cracks, blemishes, stains and edge condition caused during shifting and report to the supervisor
- PC6.** unload precast units safely at the specified location under supervision

Prepare for lifting precast units

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

- PC7.** check the availability of appropriate lifting gear, tools, tackles and PPE for lifting activities and inspect them for their safe condition for use
- PC8.** check and ensure the lifting equipment and precast components are placed at a safe distance from any overhead power or service lines
- PC9.** check the condition of precast component embedded parts like bolts; and clearance of holes provided for post tensioning sleeves in the RCC member
- PC10.** identify issues with the precast units and report to the supervisor for appropriate corrective measures to be taken
- PC11.** check and ensure appropriate barricading and safety signage at the work site and availability of required
- PC12.** follow the appropriate safety measures in rigging operations, as per the plan and instructions
- PC13.** coordinate with the equipment operator to grade and prepare the base for lifting equipment and units to be lifted
- PC14.** ensure appropriate level and compactness in the base with good drainage

Provide support in heavy lifting work



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

- PC15.** attach slings, lifting belts, shackles, hooks and tag line to the load appropriately for lifting
- PC16.** check and ensure the tightness and locking of shackles and hooks for safety
- PC17.** control the position of suspended loads using tag line according to the signals or instructions

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** the standard procedure for construction rigging work
- KU2.** the relevant safety practices for handling and storing relevant rigging tools, equipment and materials
- KU3.** the importance of personal protection and the use of relevant safety gear and equipment
- KU4.** the basic principles of measurement, geometry and arithmetic calculation
- KU5.** the units of measurement and the conversion of units of linear measurements
- KU6.** the use of hand tools for material lifting
- KU7.** the use of appropriate rigging tools to lift structural steel sections or assemblies
- KU8.** the required nature of base level and compaction required for equipment during lifting
- KU9.** the technique of guiding a suspended object using tag lines to the location of erection
- KU10.** the working mechanism of load lifting equipment, such as cranes winches, etc
- KU11.** the specification of lifting tools and tackles as per load lifting requirement
- KU12.** how to interpret gestures/ signals by the signalperson during load lifting work

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.** plan and execute tasks based on priority
- GS7.** identify possible disruptions to work and take appropriate mitigation measures
- GS8.** take prompt action to deal with workplace emergencies and accidents
- GS9.** evaluate all possible solutions to work-related problems and select the best one
- GS10.** follow the recommended practices for the timely completion of work and achievement of organizational objectives



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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Shift precast units</i>	10	20	-	3
PC1. select and use the appropriate rigging gear for heavy material shifting for precast units	-	-	-	-
PC2. anchor precast units and hook up with the prescribed lifting equipment using slings, shackles, rope or lifting hooks and secure properly to prevent slipping or deflection	-	-	-	-
PC3. tie down the precast units to the transporting vehicle using chains, binders, belts etc., to stabilize the load and prevent damage during transportation	-	-	-	-
PC4. prepare the precast units for unloading, and remove the bracing, packing and protective edges from the units	-	-	-	-
PC5. check the precast units for chipped edges, cracks, blemishes, stains and edge condition caused during shifting and report to the supervisor	-	-	-	-
PC6. unload precast units safely at the specified location under supervision	-	-	-	-
<i>Prepare for lifting precast units</i>	9	25	-	4
PC7. check the availability of appropriate lifting gear, tools, tackles and PPE for lifting activities and inspect them for their safe condition for use	-	-	-	-
PC8. check and ensure the lifting equipment and precast components are placed at a safe distance from any overhead power or service lines	-	-	-	-
PC9. check the condition of precast component embedded parts like bolts; and clearance of holes provided for post tensioning sleeves in the RCC member	-	-	-	-
PC10. identify issues with the precast units and report to the supervisor for appropriate corrective measures to be taken	-	-	-	-



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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC11. check and ensure appropriate barricading and safety signage at the work site and availability of required	-	-	-	-
PC12. follow the appropriate safety measures in rigging operations, as per the plan and instructions	-	-	-	-
PC13. coordinate with the equipment operator to grade and prepare the base for lifting equipment and units to be lifted	-	-	-	-
PC14. ensure appropriate level and compactness in the base with good drainage	-	-	-	-
<i>Provide support in heavy lifting work</i>	11	15	-	3
PC15. attach slings, lifting belts, shackles, hooks and tag line to the load appropriately for lifting	-	-	-	-
PC16. check and ensure the tightness and locking of shackles and hooks for safety	-	-	-	-
PC17. control the position of suspended loads using tag line according to the signals or instructions	-	-	-	-
NOS Total	30	60	-	10



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National Occupational Standards (NOS) Parameters

NOS Code	CON/N0709
NOS Name	Provide support in heavy lifting of precast units
Sector	Construction
Sub-Sector	Real Estate and Infrastructure construction
Occupation	Rigging
NSQF Level	3.5
Credits	3
Version	3.0
Last Reviewed Date	31/08/2023
Next Review Date	31/08/2026
NSQC Clearance Date	31/08/2023



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CON/N0710: Unload, position and align RCC precast components

Description

This occupational standards unit is about unloading, positioning and aligning RCC precast components

Scope

The scope covers the following :

- Unload, position and align precast units

Elements and Performance Criteria

Unload, position and align precast units

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

- PC1.** check for the completion of preparatory work for unloading precast units at the location of erection, and report any identified issues to the supervisor
- PC2.** coordinate with the equipment operator to lift and locate precast units into final position and to bring the units to the appropriate elevation and position
- PC3.** guide precast units into position by using guy lines and hook, as per the given instructions
- PC4.** unload steel units at the specified location under supervision
- PC5.** install temporary bracing supports and connections, such as pony clamps, tilt up jacks, turn buckles, guy lines to stabilize the unit in its position
- PC6.** check the vertical and horizontal alignment of precast units and make appropriate adjustments using the relevant measuring tools
- PC7.** place shims and bearing pads at appropriate locations, as per the supervisor's instructions
- PC8.** clean bolts and inserts to remove dust, debris and damaged threads
- PC9.** use the relevant PPE and follow appropriate safety measures while working at heights

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** the basic principles of measurement, geometry and arithmetic calculation
- KU2.** the units of measurement and the conversion of units of linear measurements
- KU3.** the use of hand tools for material lifting
- KU4.** the use of rigging tools to lift structural steel sections or assemblies
- KU5.** the required nature of base level and compaction required for equipment during lifting
- KU6.** the technique of guiding a suspended object using tag lines to the location of erection
- KU7.** the working mechanism of load lifting equipment, such as cranes winches, etc
- KU8.** the specification of lifting tools and tackles as per load lifting requirement
- KU9.** how to interpret gestures/ signals by the signalperson during load lifting work
- KU10.** how to check the alignment of erected structures



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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.** plan and execute tasks based on priority
- GS7.** identify possible disruptions to work and take appropriate mitigation measures
- GS8.** take prompt action to deal with workplace emergencies and accidents
- GS9.** evaluate all possible solutions to work-related problems and select the best one
- GS10.** follow the recommended practices for the timely completion of work and achievement of organizational objectives



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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Unload, position and align precast units</i>	30	60	-	10
PC1. check for the completion of preparatory work for unloading precast units at the location of erection, and report any identified issues to the supervisor	-	-	-	-
PC2. coordinate with the equipment operator to lift and locate precast units into final position and to bring the units to the appropriate elevation and position	-	-	-	-
PC3. guide precast units into position by using guy lines and hook, as per the given instructions	-	-	-	-
PC4. unload steel units at the specified location under supervision	-	-	-	-
PC5. install temporary bracing supports and connections, such as pony clamps, tilt up jacks, turn buckles, guy lines to stabilize the unit in its position	-	-	-	-
PC6. check the vertical and horizontal alignment of precast units and make appropriate adjustments using the relevant measuring tools	-	-	-	-
PC7. place shims and bearing pads at appropriate locations, as per the supervisor's instructions	-	-	-	-
PC8. clean bolts and inserts to remove dust, debris and damaged threads	-	-	-	-
PC9. use the relevant PPE and follow appropriate safety measures while working at heights	-	-	-	-
NOS Total	30	60	-	10



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National Occupational Standards (NOS) Parameters

NOS Code	CON/N0710
NOS Name	Unload, position and align RCC precast components
Sector	Construction
Sub-Sector	Real Estate and Infrastructure construction
Occupation	Rigging
NSQF Level	3.5
Credits	3
Version	3.0
Last Reviewed Date	31/08/2023
Next Review Date	31/08/2026
NSQC Clearance Date	31/08/2023



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CON/N0711: Apply grout and caulking agents in RCC precast components

Description

This occupational standards unit is about applying grout and caulking agents in RCC precast components

Scope

The scope covers the following :

- Carry out grouting
- Apply caulking agents

Elements and Performance Criteria

Carry out grouting

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

- PC1.** clean the identified surface to remove dust, dirt and other foreign matter using water, brush, scrapper and other prescribed tools and materials before grouting
- PC2.** prepare concrete surfaces by applying purging, priming and bonding agents as per the given instructions
- PC3.** install shutters and sealant around joints, and use flow-able grout to avoid leakage and resist grouting pressure, as per the supervisor's instructions
- PC4.** apply grout in appropriate locations using the appropriate tools
- PC5.** perform basic repair and maintenance of grouting tools, e.g. clean and store them at the designated storage

Apply caulking agents

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

- PC6.** clean the identified joints to remove dirt and other foreign matter using appropriate tools before to be caulking
- PC7.** apply primer and take necessary precautions to prevent staining at the exposed face of the precast unit
- PC8.** fill precast joints using appropriate filler materials as per the supervisor's instructions
- PC9.** mix caulking and coloring using appropriate power tools to achieve the approved sample
- PC10.** apply caulking agents to the joints using caulking gun, carrying it out to a slightly concave shape to eliminate air pockets or voids
- PC11.** using appropriate tools such as merging trowels, putty knives or wooden sticks for caulking
- PC12.** follow the appropriate methods for caulking different types of surfaces
- PC13.** follow appropriate measures to avoid direct contact with the skin
- PC14.** clean the caulking tools using appropriate cleaning agents, such as soap and water for latex based caulking, and spirit solvent for oil-based caulking

Knowledge and Understanding (KU)

The individual on the job needs to know and understand:



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- KU1.** the ideal surface condition for grouting
- KU2.** the use of relevant tools for cleaning surface and carrying out grouting
- KU3.** how to prevent the leakage of flow-able grouting agents
- KU4.** how to place temporary shutters surrounding the area to be grouted
- KU5.** how to apply primer at RCC surface to be caulked using proper hand tools
- KU6.** the safety precautions to be taken while carrying out caulking
- KU7.** the appropriate mix proportion of caulking agents to prepare the approved mix
- KU8.** how to fill joints of precast units efficiently
- KU9.** the standard practices relevant to the application of grouting agents
- KU10.** how to use a caulking gun
- KU11.** the use of appropriate cleaning agents for material and tools used in grouting and caulking

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.** plan and execute tasks based on priority
- GS7.** identify possible disruptions to work and take appropriate mitigation measures
- GS8.** take prompt action to deal with workplace emergencies and accidents
- GS9.** evaluate all possible solutions to work-related problems and select the best one
- GS10.** follow the recommended practices for the timely completion of work and achievement of organizational objectives



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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Carry out grouting</i>	14	35	-	4
PC1. clean the identified surface to remove dust, dirt and other foreign matter using water, brush, scrapper and other prescribed tools and materials before grouting	-	-	-	-
PC2. prepare concrete surfaces by applying purging, priming and bonding agents as per the given instructions	-	-	-	-
PC3. install shutters and sealant around joints, and use flow-able grout to avoid leakage and resist grouting pressure, as per the supervisor's instructions	-	-	-	-
PC4. apply grout in appropriate locations using the appropriate tools	-	-	-	-
PC5. perform basic repair and maintenance of grouting tools, e.g. clean and store them at the designated storage	-	-	-	-
<i>Apply caulking agents</i>	16	25	-	6
PC6. clean the identified joints to remove dirt and other foreign matter using appropriate tools before to be caulking	-	-	-	-
PC7. apply primer and take necessary precautions to prevent staining at the exposed face of the precast unit	-	-	-	-
PC8. fill precast joints using appropriate filler materials as per the supervisor's instructions	-	-	-	-
PC9. mix caulking and coloring using appropriate power tools to achieve the approved sample	-	-	-	-
PC10. apply caulking agents to the joints using caulking gun, carrying it out to a slightly concave shape to eliminate air pockets or voids	-	-	-	-



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Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC11. using appropriate tools such as merging trowels, putty knives or wooden sticks for caulking	-	-	-	-
PC12. follow the appropriate methods for caulking different types of surfaces	-	-	-	-
PC13. follow appropriate measures to avoid direct contact with the skin	-	-	-	-
PC14. clean the caulking tools using appropriate cleaning agents, such as soap and water for latex based caulking, and spirit solvent for oil-based caulking	-	-	-	-
NOS Total	30	60	-	10



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National Occupational Standards (NOS) Parameters

NOS Code	CON/N0711
NOS Name	Apply grout and caulking agents in RCC precast components
Sector	Construction
Sub-Sector	Real Estate and Infrastructure construction
Occupation	Rigging
NSQF Level	3.5
Credits	3
Version	3.0
Last Reviewed Date	31/08/2023
Next Review Date	31/08/2026
NSQC Clearance Date	31/08/2023



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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



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- 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



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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Interact and communicate in an effective manner</i>	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	-	-	-	-
<i>Support co-workers to execute the project requirements</i>	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	-	-	-	-
<i>Practice inclusion</i>	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	-	-



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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	10.0
Last Reviewed Date	31/08/2023
Next Review Date	31/08/2026
NSQF Clearance Date	31/08/2023



Qualification Pack

CON/N8002: Plan and organize work to meet expected outcomes

Description

This unit describes the knowledge and the skills required for an individual to plan and organize own work in order to meet expected outcome

Scope

The scope covers the following :

- Plan and prepare for work
- Organise required resources as per work plan
- Complete work as per the plan

Elements and Performance Criteria

Plan and prepare for work

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

- PC1.** identify the targets and timelines set by superiors
- PC2.** determine the work requirements corresponding to task(drawings/schedules/instructions/methodology), safety, tools and equipment prior to commencement of task
- PC3.** plan the work by analyzing the required outcomes, work procedures, allotted time, resource availability and known priorities
- PC4.** prepare the work areas in coordination with team members
- PC5.** plan for waste collection and disposal prior to and after completion of work

Organise required resources as per work plan

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

- PC6.** arrange the required manpower prior to commencement of work
- PC7.** organize the required materials, tools and tackles required for the task

Complete work as per the plan

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

- PC8.** engage allocated manpower in an appropriate manner
- PC9.** employ correct tools, tackles and equipment for the desired work
- PC10.** provide guidance to the subordinates to obtain desired outcome
- PC11.** use resources in an optimum manner to avoid any unnecessary wastage
- PC12.** use tools, tackles and equipment carefully to avoid damage
- PC13.** ensure the work processes adopted are in line with the specified standards and instructions
- PC14.** complete the work with the allocated resources within specified time
- PC15.** clean and organise the workplace after completion of task

Knowledge and Understanding (KU)



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The individual on the job needs to know and understand:

- KU1.** importance of proper housekeeping including safe waste disposal
- KU2.** policies, procedures and work targets set by superiors
- KU3.** how to identify work activities that need to be planned and organized
- KU4.** how to determine the task requirements
- KU5.** how to determine the quality requirements related to the task
- KU6.** how to undertake all aspect of planning and organizing the task, including interpretation of task, reading drawing/schedules, arranging resources, reporting problems etc.
- KU7.** how to implement the planned activities
- KU8.** how to use available resources in a judicious and appropriate manner to minimize wastages or damage

Generic Skills (GS)

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

- GS1.** write in one or more language, preferably the local language at the site
- GS2.** read communication from co-workers, superiors and notices from other departments as per requirement of the level
- GS3.** speak in one or more language, preferably one of the local language at the site
- GS4.** follow communication shared by co-workers regarding standard work processes, resources available, timelines, etc.
- GS5.** communicate effectively with co-workers and subordinates
- GS6.** decide on what sequence is to be adopted for execution of work
- GS7.** plan and organize the materials, tools, tackles and equipment required to execute the work
- GS8.** complete all assigned task with proper planning and organizing
- GS9.** analyze areas of work which could result in a delay of work, wastage of material or damage to tools and tackles
- GS10.** evaluate potential solutions to minimize avoidable delays and wastages at the construction site



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Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Plan and prepare for work</i>	9	21	-	-
PC1. identify the targets and timelines set by superiors	-	-	-	-
PC2. determine the work requirements corresponding to task(drawings/schedules/instructions/methodology), safety, tools and equipment prior to commencement of task	-	-	-	-
PC3. plan the work by analyzing the required outcomes, work procedures, allotted time, resource availability and known priorities	-	-	-	-
PC4. prepare the work areas in coordination with team members	-	-	-	-
PC5. plan for waste collection and disposal prior to and after completion of work	-	-	-	-
<i>Organise required resources as per work plan</i>	6	14	-	-
PC6. arrange the required manpower prior to commencement of work	-	-	-	-
PC7. organize the required materials, tools and tackles required for the task	-	-	-	-
<i>Complete work as per the plan</i>	15	35	-	-
PC8. engage allocated manpower in an appropriate manner	-	-	-	-
PC9. employ correct tools, tackles and equipment for the desired work	-	-	-	-
PC10. provide guidance to the subordinates to obtain desired outcome	-	-	-	-
PC11. use resources in an optimum manner to avoid any unnecessary wastage	-	-	-	-
PC12. use tools, tackles and equipment carefully to avoid damage	-	-	-	-
PC13. ensure the work processes adopted are in line with the specified standards and instructions	-	-	-	-



Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC14. complete the work with the allocated resources within specified time	-	-	-	-
PC15. clean and organise the workplace after completion of task	-	-	-	-
NOS Total	30	70	-	-



Qualification Pack

National Occupational Standards (NOS) Parameters

NOS Code	CON/N8002
NOS Name	Plan and organize work to meet expected outcomes
Sector	Construction
Sub-Sector	Real Estate and Infrastructure construction
Occupation	Generic 2
NSQF Level	4
Credits	1
Version	9.0
Last Reviewed Date	31/08/2023
Next Review Date	31/08/2026
NSQF Clearance Date	31/08/2023



Qualification Pack

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



Qualification Pack

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



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- 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



Qualification Pack

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Follow safety norms as defined by the organization</i>	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	-	-	-	-
<i>Adopt healthy & safe work practices</i>	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	-	-	-	-



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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	-	-	-	-
<i>Implement good housekeeping practices</i>	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	-	-	-	-
<i>Follow infection control guidelines as per applicability</i>	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	-	-



Qualification Pack

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



Qualification Pack

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



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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



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- 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



Qualification Pack

Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Introduction to Employability Skills</i>	1	1	-	-
PC1. understand the significance of employability skills in meeting the job requirements	-	-	-	-
<i>Constitutional values - Citizenship</i>	1	1	-	-
PC2. identify constitutional values, civic rights, duties, personal values and ethics and environmentally sustainable practices	-	-	-	-
<i>Becoming a Professional in the 21st Century</i>	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.	-	-	-	-
<i>Basic English Skills</i>	2	3	-	-
PC4. speak with others using some basic English phrases or sentences	-	-	-	-
<i>Communication Skills</i>	1	1	-	-
PC5. follow good manners while communicating with others	-	-	-	-
PC6. work with others in a team	-	-	-	-
<i>Diversity & Inclusion</i>	1	1	-	-
PC7. communicate and behave appropriately with all genders and PwD	-	-	-	-
PC8. report any issues related to sexual harassment	-	-	-	-
<i>Financial and Legal Literacy</i>	3	4	-	-
PC9. use various financial products and services safely and securely	-	-	-	-



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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	-	-	-	-
<i>Essential Digital Skills</i>	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	-	-	-	-
<i>Entrepreneurship</i>	3	5	-	-
PC14. identify and assess opportunities for potential business	-	-	-	-
PC15. identify sources for arranging money and associated financial and legal challenges	-	-	-	-
<i>Customer Service</i>	2	2	-	-
PC16. identify different types of customers	-	-	-	-
PC17. identify customer needs and address them appropriately	-	-	-	-
PC18. follow appropriate hygiene and grooming standards	-	-	-	-
<i>Getting ready for apprenticeship & Jobs</i>	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	-	-



Qualification Pack

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.



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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/N0709. Provide support in heavy lifting of precast units	30	60	0	10	100	30
CON/N0710. Unload, position and align RCC precast components	30	60	0	10	100	30
CON/N0711. Apply grout and caulking agents in RCC precast components	30	60	0	10	100	20
CON/N8001. Work effectively in a team to deliver desired results at the workplace	30	70	-	-	100	5
CON/N8002. Plan and organize work to meet expected outcomes	30	70	0	0	100	5



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National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
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	200	420	0	30	650	100



Qualification Pack

Acronyms

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



Qualification Pack

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.



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Knowledge and Understanding (KU)	<p>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.</p>
Organisational Context	<p>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.</p>
Technical Knowledge	<p>Technical knowledge is the specific knowledge needed to accomplish specific designated responsibilities.</p>
Core Skills/ Generic Skills (GS)	<p>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.</p>
Electives	<p>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.</p>
Options	<p>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.</p>