



## Qualification Pack



# Draughtsperson-Civil works

QP Code: CON/Q1301

Version: 4.0

NSQF Level: 4

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## Qualification Pack

### Contents

CON/Q1301: Draughtsperson-Civil works .....	3
<i>Brief Job Description</i> .....	3
Applicable National Occupational Standards (NOS) .....	3
<i>Compulsory NOS</i> .....	3
<i>Qualification Pack (QP) Parameters</i> .....	3
CON/N1301: Carry out the initial setup and understand the requirement for preparation of drawings .....	5
CON/N1302: Prepare 2-dimensional civil drawings using computer-aided design (CAD) system .....	9
CON/N1303: Draw different types of scales and Orthographic projections on CAD .....	15
CON/N1304: Draw different types of doors and windows on CAD .....	20
CON/N1305: Draw different types of stair structures on CAD .....	24
CON/N1306: Draw Isometric / Oblique / Perspective views of different solid / hollow / cut sections and 3D modelling concept .....	28
CON/N9004: Follow health and safety practices at work .....	34
CON/N8001: Work effectively in a team to deliver desired results at the workplace .....	39
CON/N8002: Plan and organize work to meet expected outcomes .....	43
DGT/VSQ/N0101: Employability Skills (30 Hours) .....	48
Assessment Guidelines and Weightage .....	53
<i>Assessment Guidelines</i> .....	53
<i>Assessment Weightage</i> .....	54
Acronyms .....	56
Glossary .....	59



## Qualification Pack

### CON/Q1301: Draughtsperson-Civil works

#### Brief Job Description

A Draughtsperson-Civil Works is responsible for the preparation, correction, and documentation of all types of drawings prepared for construction and erection works, showing all relevant plans, sections, elevations, and details along with other requirements as applicable based on the type of drawing.

#### Personal Attributes

The individual should be physically fit, mentally alert, and safety-conscious. The person should be able to perform efficiently within a team and work responsibly.

#### Applicable National Occupational Standards (NOS)

##### Compulsory NOS:

- [1. CON/N1301: Carry out the initial setup and understand the requirement for preparation of drawings](#)
- [2. CON/N1302: Prepare 2-dimensional civil drawings using computer-aided design \(CAD\) system](#)
- [3. CON/N1303: Draw different types of scales and Orthographic projections on CAD](#)
- [4. CON/N1304: Draw different types of doors and windows on CAD](#)
- [5. CON/N1305: Draw different types of stair structures on CAD](#)
- [6. CON/N1306: Draw Isometric / Oblique / Perspective views of different solid / hollow / cut sections and 3D modelling concept](#)
- [7. CON/N9004: Follow health and safety practices at work](#)
- [8. CON/N8001: Work effectively in a team to deliver desired results at the workplace](#)
- [9. CON/N8002: Plan and organize work to meet expected outcomes](#)
- [10. DGT/VSQ/N0101: Employability Skills \(30 Hours\)](#)

#### Qualification Pack (QP) Parameters

<b>Sector</b>	Construction
<b>Sub-Sector</b>	Real Estate and Infrastructure construction



## Qualification Pack

<b>Occupation</b>	Draughting
<b>Country</b>	India
<b>NSQF Level</b>	4
<b>Credits</b>	15
<b>Aligned to NCO/ISCO/ISIC Code</b>	NCO-2015/3118.0200
<b>Minimum Educational Qualification &amp; Experience</b>	12th grade Pass OR Completed 2nd year of the 3-year diploma after 10 (In Civil Engineering) OR Completed 2nd year diploma after 12th (in Civil Engineering)) OR 11th grade pass with 1 Year of experience Relevant Experience OR 10th grade pass with 2 Years of experience Relevant Experience
<b>Minimum Level of Education for Training in School</b>	12th Class
<b>Pre-Requisite License or Training</b>	NIL
<b>Minimum Job Entry Age</b>	18 Years
<b>Last Reviewed On</b>	NA
<b>Next Review Date</b>	30/04/2028
<b>NSQC Approval Date</b>	08/05/2025
<b>Version</b>	4.0
<b>Reference code on NQR</b>	QG-04-CO-03955-2025-V2-CSDCI
<b>NQR Version</b>	4.0



## Qualification Pack

# CON/N1301: Carry out the initial setup and understand the requirement for preparation of drawings

## Description

This unit describes the skills and knowledge required to prepare for appropriate preparatory work for drawings.

## Scope

The scope covers the following :

- Carry out preparatory works for drawings

## Elements and Performance Criteria

### *Carry out preparatory works for drawings*

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

- PC1.** identify the type of the provided drawing, e.g. civil/ architectural/ structural/ mechanical/ plumbing/ electrical
- PC2.** interpret the drawing requirements (type of projection, views), data and information received from the appropriate authorities/ sources for drawing preparation/ modification
- PC3.** prepare rough sketches from the drawing requirements using three standard source for technical information/ specifications (Indian Standard codes)
- PC4.** estimate the time required to complete the drawing based upon the scope of work
- PC5.** ensure the computer system has appropriate drawing software and other peripheral devices such as printer, plotter, scanner, etc., which are properly connected and are in safe working condition
- PC6.** customize the drawing software and adjust the page size, measurement unit/ system, scale, and plot area as per the work requirement
- PC7.** set the drawing parameters, e.g. colour, layer, line type, line weight, text font, etc.
- PC8.** prepare the title block for the drawing covering specifications required by the client or mentioned in the IS code

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** how to set up a computer and drawing software for use
- KU2.** the use of appropriate Computer-aided Software
- KU3.** various commands, functions and their shortcuts that are required for preparation of drawings
- KU4.** the correct procedure for consultation and information transfer
- KU5.** the Indian and international code of practice applicable to drawing



## Qualification Pack

- KU6.** different symbols and terms used in civil drawings, fabrication drawings, landscaping and layout drawings
- KU7.** how to carry out arithmetic calculations
- KU8.** how to interpret design parameters and other drawing requirements
- KU9.** the standard procedure for storing and maintaining documents
- KU10.** how to access, recognize and use different standard components and symbol libraries from CAD
- KU11.** the need for document control
- KU12.** how to save and store drawings
- KU13.** how to create and maintain data backups
- KU14.** the drafting concepts
- KU15.** how to accurately interpret and represent technical drawings and data

## 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 sketches/routine work drawings, instructions provided for the work, and various signboards, safety rules, safety tags, exit route information in one or more languages, preferably in the local language of the site
- GS3.** speak in one or more language, preferably one of the local language at the site
- GS4.** communicate orally and effectively with team members
- GS5.** analyze the safety aspect of the workplace
- GS6.** plan work and organize required resource effectively
- GS7.** complete work as per agreed time schedule and quality parameters
- GS8.** resolve any conflict within the teammates
- GS9.** evaluate the complexity of the tasks
- GS10.** identify any violation of safety norms during the work



## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Carry out preparatory works for drawings</i>	<b>30</b>	<b>70</b>	-	-
<b>PC1.</b> identify the type of the provided drawing, e.g. civil/ architectural/ structural/ mechanical/ plumbing/ electrical	-	-	-	-
<b>PC2.</b> interpret the drawing requirements (type of projection, views), data and information received from the appropriate authorities/ sources for drawing preparation/ modification	-	-	-	-
<b>PC3.</b> prepare rough sketches from the drawing requirements using thee standard source for technical information/ specifications (Indian Standard codes)	-	-	-	-
<b>PC4.</b> estimate the time required to complete the drawing based upon the scope of work	-	-	-	-
<b>PC5.</b> ensure the computer system has appropriate drawing software and other peripheral devices such as printer, plotter, scanner, etc., which are properly connected and are in safe working condition	-	-	-	-
<b>PC6.</b> customize the drawing software and adjust the page size, measurement unit/ system, scale, and plot area as per the work requirement	-	-	-	-
<b>PC7.</b> set the drawing parameters, e.g. colour, layer, line type, line weight, text font, etc.	-	-	-	-
<b>PC8.</b> prepare the title block for the drawing covering specifications required by the client or mentioned in the IS code	-	-	-	-
<b>NOS Total</b>	<b>30</b>	<b>70</b>	-	-



## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	CON/N1301
<b>NOS Name</b>	Carry out the initial setup and understand the requirement for preparation of drawings
<b>Sector</b>	Construction
<b>Sub-Sector</b>	Real Estate and Infrastructure construction
<b>Occupation</b>	Draughting
<b>NSQF Level</b>	4
<b>Credits</b>	1
<b>Version</b>	4.0
<b>Last Reviewed Date</b>	08/05/2025
<b>Next Review Date</b>	30/04/2028
<b>NSQC Clearance Date</b>	08/05/2025



## Qualification Pack

# CON/N1302: Prepare 2-dimensional civil drawings using computer-aided design (CAD) system

## Description

This unit describes the skills and knowledge required to prepare two-dimensional civil drawings using computer-aided design (CAD) system.

## Scope

The scope covers the following :

- Prepare 2D drawings including topographical maps, contours, civil and structural drawings, architectural drawings, etc.
- Store and maintain the produced drawings

## Elements and Performance Criteria

*Prepare 2D drawings including topographical maps, contours, civil and structural drawings, architectural drawings etc.*

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

- PC1.** carry out necessary calculations to compute dimensions of various components/ parts of the drawings
- PC2.** produce 2D CAD (Computer-Aided Design) drawings showing plans, sections, elevations, and different types of views utilizing drafting principles
- PC3.** produce topographical maps, contours, civil and structural drawings, architectural drawings as per requirement
- PC4.** draw the required drawings as per standard practices using appropriate commands
- PC5.** draw civil structures/ assemblies to highlight critical features in accordance with specifications/requirements
- PC6.** create tables/ legend to denote the name, dimensions, perimeter, and area of various parts or components of drawings as per client requirement
- PC7.** add specifications/ grid system to the drawings as per the requirements of the designer or architect
- PC8.** provide details in the drawings as per the requirement using relevant and appropriate symbols
- PC9.** ensure that the drawings conform to compliance with the supplied design parameters
- PC10.** obtain approval for the prepared drawing from the concerned authorities as per standard procedures and correct errors if any

*Store and maintain the produced drawings*

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

- PC11.** save the drawings in an appropriate storage medium
- PC12.** prepare documentation for completion of work and its approval as per applicable organisational norms



## Qualification Pack

- PC13.** produce hard copies of the finished drawings in required numbers using printers and plotters and store them appropriately

### Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** standard practices for draughting works
- KU2.** safety rules and regulations for handling and storing relevant tools, equipment, and materials required for relevant works in accordance with organizational norms
- KU3.** importance of personal protection including the use of related safety gears & equipment in accordance with organizational norms
- KU4.** service request procedures for tools, materials and equipment as per organizational norms
- KU5.** procedure for maintenance of tools and equipment
- KU6.** operation of a computer and CAD software
- KU7.** various commands, functions, and their shortcuts that are required for the preparation of drawing
- KU8.** different types of papers, their sizes, thickness, and area of application
- KU9.** various Indian and International code of practice applicable to drawings
- KU10.** different types of drawings, their requirements for execution, and details covered under them
- KU11.** different types of construction projects, their scope, types of drawings required in them
- KU12.** different symbols and terms used in civil drawings, fabrication drawings, landscaping, and layout drawings
- KU13.** detailed draughting concepts
- KU14.** concepts of civil engineering including general site operation
- KU15.** design parameters and other drawing requirements
- KU16.** how to access, recognize and use a wide range of standard components and symbol libraries from the CAD software
- KU17.** need for documentation
- KU18.** storing and maintenance of drawings
- KU19.** different types of plotters and printers and their 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 sketches/routine work drawings, instructions provided for the work, and various signboards, safety rules, safety tags, exit route information in one or more languages, preferably in the local language of the site
- GS3.** speak in one or more language, preferably one of the local language at the site
- GS4.** communicate orally and effectively with team members



## Qualification Pack

- GS5.** analyze the safety aspect of the workplace
- GS6.** plan work and organize required resource effectively
- GS7.** complete work as per agreed time schedule and quality parameters
- GS8.** resolve any conflict within the teammates
- GS9.** evaluate the complexity of the tasks
- GS10.** identify any violation of safety norms during the work



## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Prepare 2D drawings including topographical maps, contours, civil and structural drawings, architectural drawings etc.</i>	20	40	-	-
<b>PC1.</b> carry out necessary calculations to compute dimensions of various components/ parts of the drawings	-	-	-	-
<b>PC2.</b> produce 2D CAD (Computer-Aided Design) drawings showing plans, sections, elevations, and different types of views utilizing drafting principles	-	-	-	-
<b>PC3.</b> produce topographical maps, contours, civil and structural drawings, architectural drawings as per requirement	-	-	-	-
<b>PC4.</b> draw the required drawings as per standard practices using appropriate commands	-	-	-	-
<b>PC5.</b> draw civil structures/ assemblies to highlight critical features in accordance with specifications/requirements	-	-	-	-
<b>PC6.</b> create tables/ legend to denote the name, dimensions, perimeter, and area of various parts or components of drawings as per client requirement	-	-	-	-
<b>PC7.</b> add specifications/ grid system to the drawings as per the requirements of the designer or architect	-	-	-	-
<b>PC8.</b> provide details in the drawings as per the requirement using relevant and appropriate symbols	-	-	-	-
<b>PC9.</b> ensure that the drawings conform to compliance with the supplied design parameters	-	-	-	-
<b>PC10.</b> obtain approval for the prepared drawing from the concerned authorities as per standard procedures and correct errors if any	-	-	-	-
<i>Store and maintain the produced drawings</i>	10	30	-	-
<b>PC11.</b> save the drawings in an appropriate storage medium	-	-	-	-



## Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC12.</b> prepare documentation for completion of work and its approval as per applicable organisational norms	-	-	-	-
<b>PC13.</b> produce hard copies of the finished drawings in required numbers using printers and plotters and store them appropriately	-	-	-	-
<b>NOS Total</b>	<b>30</b>	<b>70</b>	-	-



## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	CON/N1302
<b>NOS Name</b>	Prepare 2-dimensional civil drawings using computer-aided design (CAD) system
<b>Sector</b>	Construction
<b>Sub-Sector</b>	Real Estate and Infrastructure construction
<b>Occupation</b>	Draughting
<b>NSQF Level</b>	4
<b>Credits</b>	2
<b>Version</b>	4.0
<b>Last Reviewed Date</b>	08/05/2025
<b>Next Review Date</b>	30/04/2028
<b>NSQC Clearance Date</b>	08/05/2025



## Qualification Pack

# CON/N1303: Draw different types of scales and Orthographic projections on CAD

## Description

This unit describes the skills and knowledge required to draw different types of scales and Orthographic projections using computer-aided design (CAD) system.

## Scope

The scope covers the following :

- Construct plain scale, comparative scale, diagonal scale and Vernier scale on CAD
- Draw Orthographic projection of different objects with proper lines, lettering and dimensioning

## Elements and Performance Criteria

### *Construct plain scale, comparative scale, diagonal scale and Vernier scale on CAD*

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

- PC1.** read and interpret the drawing requirements
- PC2.** draw different types of scales (Scale Up, Scale Down, Full Size Scale etc.)
- PC3.** identify R.F of the scale and calculate the length of scale on drawing
- PC4.** construct plain scales, comparative scales, diagonal scales and Vernier scales, mark the distance on the scale.
- PC5.** check the drawings to confirm their correctness

### *Draw Orthographic projection of different objects with proper lines, lettering and dimensioning*

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

- PC6.** read and interpret the drawing requirements
- PC7.** carry out necessary calculations to compute dimensions of various components/ parts of drawings
- PC8.** develop view in orthographic projection by placing object between horizontal and vertical plane of axes
- PC9.** create side view of blocks in different inclination on VP and HP by auxiliary vertical plane
- PC10.** write name of the drawing on heading at centre alignment,
- PC11.** write individual title for every projection drawing
- PC12.** construct drawing views, construction lines and dimension lines as per standard
- PC13.** check the drawings to confirm their compliance with the supplied design / object

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** standard practices for draughting works



## Qualification Pack

- KU2.** safety rules and regulations for handling and storing relevant tools, equipment, and materials required for relevant works in accordance with organizational norms
- KU3.** importance of personal protection including the use of related safety gears & equipment in accordance with organizational norms
- KU4.** service request procedures for tools, materials and equipment as per organizational norms
- KU5.** procedure for maintenance of tools and equipment
- KU6.** operation of a computer and CAD software
- KU7.** various commands, functions, and their shortcuts that are required for the preparation of drawing
- KU8.** different types of papers, their sizes, thickness, and area of application
- KU9.** various Indian and International code of practice applicable to drawings
- KU10.** different types of drawings, their requirements for execution, and details covered under them
- KU11.** different types of construction projects, their scope, types of drawings required in them
- KU12.** different symbols and terms used in civil drawings, fabrication drawings, landscaping, and layout drawings
- KU13.** detailed draughting concepts
- KU14.** concepts of civil engineering including general site operation
- KU15.** design parameters and other drawing requirements
- KU16.** how to access, recognize and use a wide range of standard components and symbol libraries from the CAD software
- KU17.** need for documentation
- KU18.** storing and maintenance of drawings
- KU19.** different types of plotters and printers and their 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 sketches/routine work drawings, instructions provided for the work, and various signboards, safety rules, safety tags, exit route information in one or more languages, preferably in the local language of the site
- GS3.** speak in one or more language, preferably one of the local language at the site
- GS4.** communicate orally and effectively with team members
- GS5.** analyze the safety aspect of the workplace
- GS6.** plan work and organize required resource effectively
- GS7.** complete work as per agreed time schedule and quality parameters
- GS8.** resolve any conflict within the teammates
- GS9.** evaluate the complexity of the tasks
- GS10.** identify any violation of safety norms during the work



## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Construct plain scale, comparative scale, diagonal scale and Vernier scale on CAD</i>	<b>15</b>	<b>35</b>	-	-
<b>PC1.</b> read and interpret the drawing requirements	-	-	-	-
<b>PC2.</b> draw different types of scales (Scale Up, Scale Down, Full Size Scale etc.)	-	-	-	-
<b>PC3.</b> identify R.F of the scale and calculate the length of scale on drawing	-	-	-	-
<b>PC4.</b> construct plain scales, comparative scales, diagonal scales and Vernier scales, mark the distance on the scale.	-	-	-	-
<b>PC5.</b> check the drawings to confirm their correctness	-	-	-	-
<i>Draw Orthographic projection of different objects with proper lines, lettering and dimensioning</i>	<b>15</b>	<b>35</b>	-	-
<b>PC6.</b> read and interpret the drawing requirements	-	-	-	-
<b>PC7.</b> carry out necessary calculations to compute dimensions of various components/ parts of drawings	-	-	-	-
<b>PC8.</b> develop view in orthographic projection by placing object between horizontal and vertical plane of axes	-	-	-	-
<b>PC9.</b> create side view of blocks in different inclination on VP and HP by auxiliary vertical plane	-	-	-	-
<b>PC10.</b> write name of the drawing on heading at centre alignment,	-	-	-	-
<b>PC11.</b> write individual title for every projection drawing	-	-	-	-
<b>PC12.</b> construct drawing views, construction lines and dimension lines as per standard	-	-	-	-



## Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
PC13. check the drawings to confirm their compliance with the supplied design / object	-	-	-	-
<b>NOS Total</b>	<b>30</b>	<b>70</b>	-	-



## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	CON/N1303
<b>NOS Name</b>	Draw different types of scales and Orthographic projections on CAD
<b>Sector</b>	Construction
<b>Sub-Sector</b>	
<b>Occupation</b>	Draughting
<b>NSQF Level</b>	4
<b>Credits</b>	2
<b>Version</b>	1.0
<b>Last Reviewed Date</b>	08/05/2025
<b>Next Review Date</b>	30/04/2028
<b>NSQC Clearance Date</b>	08/05/2025



## Qualification Pack

# CON/N1304: Draw different types of doors and windows on CAD

## Description

This unit describes the skills and knowledge required to draw different types of doors and windows using computer-aided design (CAD) system.

## Scope

The scope covers the following :

- Draw different types of doors and windows according to manner of construction, Arrangement of component and working operation

## Elements and Performance Criteria

*Draw different types of doors and windows according to manner of construction, Arrangement of component and working operation*

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

- PC1.** read and interpret the drawing requirements such as rough sketches, specifications, drawing brief, RFD etc.
- PC2.** carry out necessary calculations to compute dimensions of various components/ parts of drawings
- PC3.** draw ledged and battened door
- PC4.** draw panelled door and panelled and glazed door
- PC5.** draw different types of fixtures and fastenings
- PC6.** draw various types of doors such as flush doors, collapsible door, sliding door
- PC7.** draw various types of windows such as panelled windows, metal windows, corner window, gable window, ventilators
- PC8.** provide specifications and use codes and other references as per the drawing requirements
- PC9.** check drawings to confirm their compliance with the required design

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** standard practices for draughting works
- KU2.** safety rules and regulations for handling and storing relevant tools, equipment, and materials required for relevant works in accordance with organizational norms
- KU3.** importance of personal protection including the use of related safety gears & equipment in accordance with organizational norms
- KU4.** service request procedures for tools, materials and equipment as per organizational norms
- KU5.** procedure for maintenance of tools and equipment
- KU6.** operation of a computer and CAD software



## Qualification Pack

- KU7.** various commands, functions, and their shortcuts that are required for the preparation of drawing
- KU8.** different types of papers, their sizes, thickness, and area of application
- KU9.** various Indian and International code of practice applicable to drawings
- KU10.** different types of drawings, their requirements for execution, and details covered under them
- KU11.** different types of construction projects, their scope, types of drawings required in them
- KU12.** different symbols and terms used in civil drawings, fabrication drawings, landscaping, and layout drawings
- KU13.** detailed draughting concepts
- KU14.** concepts of civil engineering including general site operation
- KU15.** design parameters and other drawing requirements
- KU16.** how to access, recognize and use a wide range of standard components and symbol libraries from the CAD software
- KU17.** need for documentation
- KU18.** storing and maintenance of drawings
- KU19.** different types of plotters and printers and their 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 sketches/routine work drawings, instructions provided for the work, and various signboards, safety rules, safety tags, exit route information in one or more languages, preferably in the local language of the site
- GS3.** speak in one or more language, preferably one of the local language at the site
- GS4.** communicate orally and effectively with team members
- GS5.** analyze the safety aspect of the workplace
- GS6.** plan work and organize required resource effectively
- GS7.** complete work as per agreed time schedule and quality parameters
- GS8.** resolve any conflict within the teammates
- GS9.** evaluate the complexity of the tasks
- GS10.** identify any violation of safety norms during the work



## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Draw different types of doors and windows according to manner of construction, Arrangement of component and working operation</i>	<b>30</b>	<b>70</b>	-	-
<b>PC1.</b> read and interpret the drawing requirements such as rough sketches, specifications, drawing brief, RFD etc.	-	-	-	-
<b>PC2.</b> carry out necessary calculations to compute dimensions of various components/ parts of drawings	-	-	-	-
<b>PC3.</b> draw ledged and battened door	-	-	-	-
<b>PC4.</b> draw panelled door and panelled and glazed door	-	-	-	-
<b>PC5.</b> draw different types of fixtures and fastenings	-	-	-	-
<b>PC6.</b> draw various types of doors such as flush doors, collapsible door, sliding door	-	-	-	-
<b>PC7.</b> draw various types of windows such as panelled windows, metal windows, corner window, gable window, ventilators	-	-	-	-
<b>PC8.</b> provide specifications and use codes and other references as per the drawing requirements	-	-	-	-
<b>PC9.</b> check drawings to confirm their compliance with the required design	-	-	-	-
<b>NOS Total</b>	<b>30</b>	<b>70</b>	-	-



## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	CON/N1304
<b>NOS Name</b>	Draw different types of doors and windows on CAD
<b>Sector</b>	Construction
<b>Sub-Sector</b>	
<b>Occupation</b>	Draughting
<b>NSQF Level</b>	4
<b>Credits</b>	2
<b>Version</b>	1.0
<b>Last Reviewed Date</b>	08/05/2025
<b>Next Review Date</b>	30/04/2028
<b>NSQC Clearance Date</b>	08/05/2025



## Qualification Pack

# CON/N1305: Draw different types of stair structures on CAD

## Description

This unit describes the skills and knowledge required to draw stairs according to shape, location, materials in stair by using computer-aided design (CAD) system.

## Scope

The scope covers the following :

- Draw vertical movement structures (Stair)

## Elements and Performance Criteria

### *Draw vertical movement structures (Stair)*

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

- PC1.** read and interpret the drawing requirements such as rough sketches, specifications, drawing brief, RFD etc.
- PC2.** carry out necessary calculations to compute dimensions of various components/ parts of drawings
- PC3.** stair draw straight stair
- PC4.** draw quarter turn newel stair
- PC5.** draw bifurcated stair
- PC6.** draw quarter turn and geometrical stair
- PC7.** draw half turn and R.C.C dog legged stair
- PC8.** draw the R.C.C open well stair
- PC9.** draw three quater turn stairs
- PC10.** draw spiral stairs
- PC11.** add symbols and specifications and use codes and other references as per the drawing requirements
- PC12.** check drawings to confirm their compliance with the required design

## Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** standard practices for draughting works
- KU2.** safety rules and regulations for handling and storing relevant tools, equipment, and materials required for relevant works in accordance with organizational norms
- KU3.** importance of personal protection including the use of related safety gears & equipment in accordance with organizational norms
- KU4.** service request procedures for tools, materials and equipment as per organizational norms
- KU5.** procedure for maintenance of tools and equipment



## Qualification Pack

- KU6.** operation of a computer and CAD software
- KU7.** various commands, functions, and their shortcuts that are required for the preparation of drawing
- KU8.** different types of papers, their sizes, thickness, and area of application
- KU9.** various Indian and International code of practice applicable to drawings
- KU10.** different types of drawings, their requirements for execution, and details covered under them
- KU11.** different types of construction projects, their scope, types of drawings required in them
- KU12.** different symbols and terms used in civil drawings, fabrication drawings, landscaping, and layout drawings
- KU13.** detailed draughting concepts
- KU14.** concepts of civil engineering including general site operation
- KU15.** design parameters and other drawing requirements
- KU16.** how to access, recognize and use a wide range of standard components and symbol libraries from the CAD software
- KU17.** need for documentation
- KU18.** storing and maintenance of drawings
- KU19.** different types of plotters and printers and their 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 sketches/routine work drawings, instructions provided for the work, and various signboards, safety rules, safety tags, exit route information in one or more languages, preferably in the local language of the site
- GS3.** speak in one or more language, preferably one of the local language at the site
- GS4.** communicate orally and effectively with team members
- GS5.** analyze the safety aspect of the workplace
- GS6.** plan work and organize required resource effectively
- GS7.** complete work as per agreed time schedule and quality parameters
- GS8.** resolve any conflict within the teammates
- GS9.** evaluate the complexity of the tasks
- GS10.** identify any violation of safety norms during the work



## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Draw vertical movement structures (Stair)</i>	<b>30</b>	<b>70</b>	-	-
<b>PC1.</b> read and interpret the drawing requirements such as rough sketches, specifications, drawing brief, RFD etc.	-	-	-	-
<b>PC2.</b> carry out necessary calculations to compute dimensions of various components/ parts of drawings	-	-	-	-
<b>PC3.</b> stair draw straight stair	-	-	-	-
<b>PC4.</b> draw quarter turn newel stair	-	-	-	-
<b>PC5.</b> draw bifurcated stair	-	-	-	-
<b>PC6.</b> draw quarter turn and geometrical stair	-	-	-	-
<b>PC7.</b> draw half turn and R.C.C dog legged stair	-	-	-	-
<b>PC8.</b> draw the R.C.C open well stair	-	-	-	-
<b>PC9.</b> draw three quarter turn stairs	-	-	-	-
<b>PC10.</b> draw spiral stairs	-	-	-	-
<b>PC11.</b> add symbols and specifications and use codes and other references as per the drawing requirements	-	-	-	-
<b>PC12.</b> check drawings to confirm their compliance with the required design	-	-	-	-
<b>NOS Total</b>	<b>30</b>	<b>70</b>	-	-



## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	CON/N1305
<b>NOS Name</b>	Draw different types of stair structures on CAD
<b>Sector</b>	Construction
<b>Sub-Sector</b>	
<b>Occupation</b>	Draughting
<b>NSQF Level</b>	4
<b>Credits</b>	2
<b>Version</b>	1.0
<b>Last Reviewed Date</b>	08/05/2025
<b>Next Review Date</b>	30/04/2028
<b>NSQC Clearance Date</b>	08/05/2025



## Qualification Pack

# CON/N1306: Draw Isometric / Oblique / Perspective views of different solid / hollow / cut sections and 3D modelling concept

## Description

This unit describes the skills and knowledge required to draw Isometric / Oblique / Perspective views of different solid / hollow / cut sections and 3D modelling concept using computer-aided design (CAD) system.

## Scope

The scope covers the following :

- Draw Isometric / Oblique / Perspective views of different solid / hollow / cut sections with proper lines, lettering and dimensioning
- Create objects on 3D modelling concept in CAD

## Elements and Performance Criteria

*Draw Isometric / Oblique / Perspective views of different solid / hollow / cut sections with proper lines, lettering and dimensioning*

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

- PC1.** read and interpret the drawing requirements.
- PC2.** carry out necessary calculations to compute dimensions of various components/ parts of drawings.
- PC3.** construct an Isometric scale to a given length. draw the isometric projection of regular solids
- PC4.** draw the isometric views for the given solids with hollow and cut sections
- PC5.** draw the given objects/component in perspective view by Vanishing point method Single point perspective Two-point perspective/Angular perspective visual ray method/multi-view method
- PC6.** create tables/ legend to denote the name, dimensions, perimeter, and area of various parts or components of drawings as per client requirement
- PC7.** check the drawings to confirm their compliance with the supplied design / object.

*Create objects on 3D modelling concept in CAD*

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

- PC8.** start up the software and adjust the page size, measurement unit, scale and plot area before starting the work.
- PC9.** explain 3D modelling concept in CAD.
- PC10.** demonstrate 3D coordinate systems to aid in the construction of 3D objects
- PC11.** create and use model space viewports
- PC12.** create a standard engineering layout.
- PC13.** create and edit wireframe model.
- PC14.** create and edit solid mesh and surface modelling.
- PC15.** create and edit simple 2D regions and 3D solid models.



## Qualification Pack

- PC16.** generate 3D text and dimensions using a variety of 3D display techniques.
- PC17.** render a 3D model with a variety of lights and materials.
- PC18.** plot the drawing with required scale.
- PC19.** check drawings to confirm their compliance with the required design.

### Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** standard practices for draughting works
- KU2.** safety rules and regulations for handling and storing relevant tools, equipment, and materials required for relevant works in accordance with organizational norms
- KU3.** importance of personal protection including the use of related safety gears & equipment in accordance with organizational norms
- KU4.** service request procedures for tools, materials and equipment as per organizational norms
- KU5.** procedure for maintenance of tools and equipment
- KU6.** operation of a computer and CAD software
- KU7.** various commands, functions, and their shortcuts that are required for the preparation of drawing
- KU8.** different types of papers, their sizes, thickness, and area of application
- KU9.** various Indian and International code of practice applicable to drawings
- KU10.** different types of drawings, their requirements for execution, and details covered under them
- KU11.** different types of construction projects, their scope, types of drawings required in them
- KU12.** different symbols and terms used in civil drawings, fabrication drawings, landscaping, and layout drawings
- KU13.** detailed draughting concepts
- KU14.** concepts of civil engineering including general site operation
- KU15.** design parameters and other drawing requirements
- KU16.** how to access, recognize and use a wide range of standard components and symbol libraries from the CAD software
- KU17.** need for documentation
- KU18.** storing and maintenance of drawings
- KU19.** different types of plotters and printers and their 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 sketches/routine work drawings, instructions provided for the work, and various signboards, safety rules, safety tags, exit route information in one or more languages, preferably in the local language of the site



## Qualification Pack

- GS3.** speak in one or more language, preferably one of the local language at the site
- GS4.** communicate orally and effectively with team members
- GS5.** analyze the safety aspect of the workplace
- GS6.** plan work and organize required resource effectively
- GS7.** complete work as per agreed time schedule and quality parameters
- GS8.** resolve any conflict within the teammates
- GS9.** evaluate the complexity of the tasks
- GS10.** identify any violation of safety norms during the work



## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Draw Isometric / Oblique / Perspective views of different solid / hollow / cut sections with proper lines, lettering and dimensioning</i>	<b>15</b>	<b>35</b>	-	-
<b>PC1.</b> read and interpret the drawing requirements.	-	-	-	-
<b>PC2.</b> carry out necessary calculations to compute dimensions of various components/ parts of drawings.	-	-	-	-
<b>PC3.</b> construct an Isometric scale to a given length. draw the isometric projection of regular solids	-	-	-	-
<b>PC4.</b> draw the isometric views for the given solids with hollow and cut sections	-	-	-	-
<b>PC5.</b> draw the given objects/component in perspective view by Vanishing point method Single point perspective Two-point perspective/Angular perspective visual ray method/multi-view method	-	-	-	-
<b>PC6.</b> create tables/ legend to denote the name, dimensions, perimeter, and area of various parts or components of drawings as per client requirement	-	-	-	-
<b>PC7.</b> check the drawings to confirm their compliance with the supplied design / object.	-	-	-	-
<i>Create objects on 3D modelling concept in CAD</i>	<b>15</b>	<b>35</b>	-	-
<b>PC8.</b> start up the software and adjust the page size, measurement unit, scale and plot area before starting the work.	-	-	-	-
<b>PC9.</b> explain 3D modelling concept in CAD.	-	-	-	-
<b>PC10.</b> demonstrate 3D coordinate systems to aid in the construction of 3D objects	-	-	-	-
<b>PC11.</b> create and use model space viewports	-	-	-	-
<b>PC12.</b> create a standard engineering layout.	-	-	-	-



## Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC13.</b> create and edit wireframe model.	-	-	-	-
<b>PC14.</b> create and edit solid mesh and surface modelling.	-	-	-	-
<b>PC15.</b> create and edit simple 2D regions and 3D solid models.	-	-	-	-
<b>PC16.</b> generate 3D text and dimensions using a variety of 3D display techniques.	-	-	-	-
<b>PC17.</b> render a 3D model with a variety of lights and materials.	-	-	-	-
<b>PC18.</b> plot the drawing with required scale.	-	-	-	-
<b>PC19.</b> check drawings to confirm their compliance with the required design.	-	-	-	-
<b>NOS Total</b>	<b>30</b>	<b>70</b>	-	-



## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	CON/N1306
<b>NOS Name</b>	Draw Isometric / Oblique / Perspective views of different solid / hollow / cut sections and 3D modelling concept
<b>Sector</b>	Construction
<b>Sub-Sector</b>	
<b>Occupation</b>	Draughting
<b>NSQF Level</b>	4
<b>Credits</b>	2
<b>Version</b>	1.0
<b>Last Reviewed Date</b>	08/05/2025
<b>Next Review Date</b>	30/04/2028
<b>NSQC Clearance Date</b>	08/05/2025



## Qualification Pack

### CON/N9004: Follow health and safety practices at work

#### Description

This occupational standards unit is about following health and safety practices at work.

#### Scope

The scope covers the following :

- Maintain health and safety at work
- Follow workplace emergency procedures

#### Elements and Performance Criteria

##### *Maintain health and safety at work*

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

- PC1.** select and use the appropriate Personal Protective Equipment (PPE) according to the nature of work
- PC2.** follow the appropriate practices to ensure personal hygiene, e.g. use of soap and sanitizer to maintain hand hygiene
- PC3.** follow the recommended safety practices to avoid physical harm, e.g. maintaining the appropriate body posture while lifting heavy items
- PC4.** assist in identifying and mitigating potential hazards at the workplace, e.g. fire hazards or the spread of infectious diseases
- PC5.** follow the applicable regulations in the handling, recycling and disposal of waste at the workplace

##### *Follow workplace emergency procedures*

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

- PC6.** prepare to deal with workplace emergencies by participating in regular safety drills
- PC7.** follow the recommended practices during workplace emergencies, e.g. exiting to the safe assembly area
- PC8.** coordinate with the firefighters and medical professionals during critical emergencies
- PC9.** use the appropriate fire extinguisher and other emergency equipment as per the manufacturer's instructions
- PC10.** assist in administering first aid to the injured or unwell personnel
- PC11.** assist in preparing the relevant reports by providing appropriate details to notify the relevant authority about workplace health and safety incidents

#### Knowledge and Understanding (KU)

The individual on the job needs to know and understand:

- KU1.** the importance of personal protection in the workplace
- KU2.** the use of appropriate PPE at the workplace



## Qualification Pack

- KU3.** the relevant practices to maintain hygiene at work
- KU4.** the benefits of identifying and mitigating potential hazards
- KU5.** the applicable waste management practices
- KU6.** the applicable practices for sanitizing the workplace
- KU7.** the appropriate practices to be followed during workplace emergencies, such as fire, accidents, disease outbreaks or natural calamities
- KU8.** how to administer first aid
- KU9.** the use of relevant emergency equipment
- KU10.** the documentation requirements concerning workplace emergencies

## 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 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



## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Maintain health and safety at work</i>	<b>15</b>	<b>40</b>	-	-
<b>PC1.</b> select and use the appropriate Personal Protective Equipment (PPE) according to the nature of work	-	-	-	-
<b>PC2.</b> follow the appropriate practices to ensure personal hygiene, e.g. use of soap and sanitizer to maintain hand hygiene	-	-	-	-
<b>PC3.</b> follow the recommended safety practices to avoid physical harm, e.g. maintaining the appropriate body posture while lifting heavy items	-	-	-	-
<b>PC4.</b> assist in identifying and mitigating potential hazards at the workplace, e.g. fire hazards or the spread of infectious diseases	-	-	-	-
<b>PC5.</b> follow the applicable regulations in the handling, recycling and disposal of waste at the workplace	-	-	-	-
<i>Follow workplace emergency procedures</i>	<b>15</b>	<b>30</b>	-	-
<b>PC6.</b> prepare to deal with workplace emergencies by participating in regular safety drills	-	-	-	-
<b>PC7.</b> follow the recommended practices during workplace emergencies, e.g. exiting to the safe assembly area	-	-	-	-
<b>PC8.</b> coordinate with the firefighters and medical professionals during critical emergencies	-	-	-	-
<b>PC9.</b> use the appropriate fire extinguisher and other emergency equipment as per the manufacturer's instructions	-	-	-	-
<b>PC10.</b> assist in administering first aid to the injured or unwell personnel	-	-	-	-



## Qualification Pack

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC11.</b> assist in preparing the relevant reports by providing appropriate details to notify the relevant authority about workplace health and safety incidents	-	-	-	-
<b>NOS Total</b>	<b>30</b>	<b>70</b>	-	-



## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	CON/N9004
<b>NOS Name</b>	Follow health and safety practices at work
<b>Sector</b>	Construction
<b>Sub-Sector</b>	Generic
<b>Occupation</b>	Generic Safety
<b>NSQF Level</b>	4
<b>Credits</b>	1
<b>Version</b>	1.0
<b>Last Reviewed Date</b>	08/05/2025
<b>Next Review Date</b>	30/04/2028
<b>NSQC Clearance Date</b>	08/05/2025



## Qualification Pack

# 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



## Qualification Pack

- 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



## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Interact and communicate in an effective manner</i>	<b>20</b>	<b>40</b>	-	-
<b>PC1.</b> pass on work related information/ requirement clearly to the team members	-	-	-	-
<b>PC2.</b> inform co-workers and superiors about any kind of deviations from work	-	-	-	-
<b>PC3.</b> report any unresolved problem to the supervisor immediately	-	-	-	-
<b>PC4.</b> obtain instructions from superiors and respond on the same	-	-	-	-
<b>PC5.</b> communicate to team members/subordinates for appropriate work technique and method	-	-	-	-
<b>PC6.</b> seek clarification and advice as per the requirement	-	-	-	-
<i>Support co-workers to execute the project requirements</i>	<b>5</b>	<b>15</b>	-	-
<b>PC7.</b> hand over the required material, tools, tackles, equipment and work fronts timely to interfacing teams	-	-	-	-
<b>PC8.</b> work together with co-workers in a synchronized manner	-	-	-	-
<i>Practice inclusion</i>	<b>5</b>	<b>15</b>	-	-
<b>PC9.</b> maintain cultural inclusivity at work place	-	-	-	-
<b>PC10.</b> maintain disability friendly work practices	-	-	-	-
<b>PC11.</b> follow gender neutral practices at workplace	-	-	-	-
<b>PC12.</b> address discriminatory and offensive behaviour in a professional manner as per organizational policy	-	-	-	-
<b>NOS Total</b>	<b>30</b>	<b>70</b>	-	-



## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	CON/N8001
<b>NOS Name</b>	Work effectively in a team to deliver desired results at the workplace
<b>Sector</b>	Construction
<b>Sub-Sector</b>	Real Estate and Infrastructure construction
<b>Occupation</b>	Generic 2
<b>NSQF Level</b>	4
<b>Credits</b>	1
<b>Version</b>	3.0
<b>Last Reviewed Date</b>	08/05/2025
<b>Next Review Date</b>	30/04/2028
<b>NSQC Clearance Date</b>	08/05/2025



## 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)



## Qualification Pack

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



## Qualification Pack

### Assessment Criteria

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<i>Plan and prepare for work</i>	<b>10</b>	<b>20</b>	-	-
<b>PC1.</b> identify the targets and timelines set by superiors	-	-	-	-
<b>PC2.</b> determine the work requirements corresponding to task(drawings/schedules/instructions/methodology), safety, tools and equipment prior to commencement of task	-	-	-	-
<b>PC3.</b> plan the work by analyzing the required outcomes, work procedures, allotted time, resource availability and known priorities	-	-	-	-
<b>PC4.</b> prepare the work areas in coordination with team members	-	-	-	-
<b>PC5.</b> plan for waste collection and disposal prior to and after completion of work	-	-	-	-
<i>Organise required resources as per work plan</i>	<b>5</b>	<b>15</b>	-	-
<b>PC6.</b> arrange the required manpower prior to commencement of work	-	-	-	-
<b>PC7.</b> organize the required materials, tools and tackles required for the task	-	-	-	-
<i>Complete work as per the plan</i>	<b>15</b>	<b>35</b>	-	-
<b>PC8.</b> engage allocated manpower in an appropriate manner	-	-	-	-
<b>PC9.</b> employ correct tools, tackles and equipment for the desired work	-	-	-	-
<b>PC10.</b> provide guidance to the subordinates to obtain desired outcome	-	-	-	-
<b>PC11.</b> use resources in an optimum manner to avoid any unnecessary wastage	-	-	-	-
<b>PC12.</b> use tools, tackles and equipment carefully to avoid damage	-	-	-	-
<b>PC13.</b> 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	-	-	-	-
<b>NOS Total</b>	<b>30</b>	<b>70</b>	-	-



## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	CON/N8002
<b>NOS Name</b>	Plan and organize work to meet expected outcomes
<b>Sector</b>	Construction
<b>Sub-Sector</b>	Real Estate and Infrastructure construction
<b>Occupation</b>	Generic 2
<b>NSQF Level</b>	4
<b>Credits</b>	1
<b>Version</b>	4.0
<b>Last Reviewed Date</b>	08/05/2025
<b>Next Review Date</b>	30/04/2028
<b>NSQC Clearance Date</b>	08/05/2025



## 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



## Qualification Pack

### *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



## Qualification Pack

- 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>	<b>1</b>	<b>1</b>	-	-
<b>PC1.</b> understand the significance of employability skills in meeting the job requirements	-	-	-	-
<i>Constitutional values - Citizenship</i>	<b>1</b>	<b>1</b>	-	-
<b>PC2.</b> identify constitutional values, civic rights, duties, personal values and ethics and environmentally sustainable practices	-	-	-	-
<i>Becoming a Professional in the 21st Century</i>	<b>1</b>	<b>3</b>	-	-
<b>PC3.</b> 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>	<b>2</b>	<b>3</b>	-	-
<b>PC4.</b> speak with others using some basic English phrases or sentences	-	-	-	-
<i>Communication Skills</i>	<b>1</b>	<b>1</b>	-	-
<b>PC5.</b> follow good manners while communicating with others	-	-	-	-
<b>PC6.</b> work with others in a team	-	-	-	-
<i>Diversity &amp; Inclusion</i>	<b>1</b>	<b>1</b>	-	-
<b>PC7.</b> communicate and behave appropriately with all genders and PwD	-	-	-	-
<b>PC8.</b> report any issues related to sexual harassment	-	-	-	-
<i>Financial and Legal Literacy</i>	<b>3</b>	<b>4</b>	-	-
<b>PC9.</b> use various financial products and services safely and securely	-	-	-	-



## Qualification Pack

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



## Qualification Pack

### National Occupational Standards (NOS) Parameters

<b>NOS Code</b>	DGT/VSQ/N0101
<b>NOS Name</b>	Employability Skills (30 Hours)
<b>Sector</b>	Cross Sectoral
<b>Sub-Sector</b>	Professional Skills
<b>Occupation</b>	Employability
<b>NSQF Level</b>	2
<b>Credits</b>	1
<b>Version</b>	1.0
<b>Last Reviewed Date</b>	12/03/2026
<b>Next Review Date</b>	12/03/2029
<b>NSQC Clearance Date</b>	12/03/2026

## Assessment Guidelines and Assessment Weightage

### Assessment Guidelines

1. Criteria for assessment for each Qualification Pack will be created by CSDCI. Each Performance Criteria (PC)/ Elements will be assigned marks proportional to its importance in NOS.
2. CSDCI will also lay down proportion of marks for Theory and Skills Practical for each PC/ Elements. The assessment for the knowledge part will be based on knowledge bank of questions created by Assessment Bodies subject to approval by CSDCI.
3. Individual assessment agencies will create unique question papers for knowledge/theory part for assessment of candidates as per assessment criteria given below:
  - a) Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training center based on assessment criteria.
  - b) The passing percentage for the QP will be 70%. To pass the Qualification Pack.
  - c) The Assessor shall check the final outcome of the practices while evaluating the steps performed to achieve the final outcome
  - d) The trainee shall be provided with a chance to repeat the test to correct his procedures in case of



## Qualification Pack

improper performance, with a deduction of marks for each iteration.

e) 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.

f) 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 time frame set by CSDCI.

g) The candidates shall undergo On job training (OJT), and will learn at actual workplace for a fixed period of time and a certain weightage of assessment is allocated out of total skill weightage of Qualification Pack for undergoing OJT as stipulated by CSDCI. This OJT score and assessors' end point score are combined to arrive at final Marking/grading of trainees' skill test. The OJT score is determined by Supervisor of company under which candidates undergo on job training.

### 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/N1301.Carry out the initial setup and understand the requirement for preparation of drawings	30	70	-	-	100	10
CON/N1302.Prepare 2-dimensional civil drawings using computer-aided design (CAD) system	30	70	-	-	100	10
CON/N1303.Draw different types of scales and Orthographic projections on CAD	30	70	-	-	100	10
CON/N1304.Draw different types of doors and windows on CAD	30	70	-	-	100	10



### Qualification Pack

National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
CON/N1305.Draw different types of stair structures on CAD	30	70	-	-	100	10
CON/N1306.Draw Isometric / Oblique / Perspective views of different solid / hollow / cut sections and 3D modelling concept	30	70	-	-	100	10
CON/N9004.Follow health and safety practices at work	30	70	-	-	100	10
CON/N8001.Work effectively in a team to deliver desired results at the workplace	30	70	-	-	100	10
CON/N8002.Plan and organize work to meet expected outcomes	30	70	-	-	100	10
DGT/VSQ/N0101.Employability Skills (30 Hours)	20	30	-	-	50	10
<b>Total</b>	<b>290</b>	<b>660</b>	<b>-</b>	<b>-</b>	<b>950</b>	<b>100</b>



## Qualification Pack

### Acronyms

<b>NOS</b>	National Occupational Standard(s)
<b>NSQF</b>	National Skills Qualifications Framework
<b>QP</b>	Qualifications Pack
<b>TVET</b>	Technical and Vocational Education and Training
<b>MSDE</b>	Ministry of Skill Development and Entrepreneurship
<b>NCVET</b>	National Council for Vocational Education and Training
<b>NSDC</b>	National Skill Development Corporation
<b>SIDH</b>	Skill India Digital Hub
<b>CSDCI</b>	Construction Skill Development Council of India
<b>AB</b>	Awarding Body
<b>SSC</b>	Sector Skill Council
<b>PMKVY</b>	Pradhan Mantri Kaushal Vikas Yojana
<b>DDU-GKY</b>	Deen Dayal Upadhyaya Grameen Kaushalya Yojana
<b>SANKALP</b>	Skill Acquisition and Knowledge Awareness for Livelihood Promotion
<b>STRIVE</b>	Skills Strengthening for Industrial Value Enhancement
<b>JSS</b>	Jan Shikshan Sansthan
<b>STT</b>	Short Term Training
<b>RPL</b>	Recognition of Prior Learning
<b>NAPS</b>	National Apprenticeship Promotion Scheme
<b>AA</b>	Assessment Agency
<b>TP</b>	Training Provider / Training Partner
<b>TC</b>	Training Centre
<b>ITI</b>	Industrial Training Institute
<b>NSQC</b>	National Skill Qualification Committee
<b>NSQF</b>	National Skills Qualification Framework



## Qualification Pack

<b>Q-File</b>	Qualification File
<b>QP</b>	Qualification Pack
<b>MC</b>	Model Curriculum
<b>NOS</b>	National Occupational Standards
<b>PC</b>	Performance Criteria
<b>KU</b>	Knowledge and Understanding
<b>GS</b>	Generic Skills
<b>MCQ</b>	Multiple Choice Question
<b>EHS</b>	Environment Health and Safety
<b>PPE</b>	Personal Protective Equipment
<b>QA/QC</b>	Quality Assurance / Quality Control
<b>CAD</b>	Computer-Aided Design
<b>BIM</b>	Building Information Modelling
<b>BOQ</b>	Bill of Quantities
<b>DPC</b>	Damp Proof Course
<b>FSI</b>	Floor Space Index
<b>FAR</b>	Floor Area Ratio
<b>RL</b>	Reduced Level
<b>TBM</b>	Temporary Benchmark
<b>NGL</b>	Natural Ground Level
<b>LWL</b>	Low Water Level
<b>HFL</b>	High Flood Level
<b>PC</b>	Point of Curve
<b>TP</b>	Turning Point
<b>CG</b>	Center of Gravity
<b>RCC</b>	Reinforced Cement Concrete



## Qualification Pack

<b>PCC</b>	Plain Cement Concrete
<b>TMT</b>	Thermo-Mechanically Treated (Steel Bars)
<b>MS</b>	Mild Steel
<b>SS</b>	Stainless Steel
<b>ACS</b>	Asbestos Cement Sheet
<b>BBS</b>	Bar Bending Schedule
<b>GA Drawing</b>	General Arrangement Drawing
<b>RC Drawing</b>	Reinforced Concrete Drawing
<b>ASD</b>	Allowable Stress Design
<b>WSD</b>	Working Stress Design
<b>LOI</b>	Letter of Intent
<b>NOC</b>	No Objection Certificate
<b>RFI</b>	Request for Information
<b>IS Code</b>	Indian Standard Code
<b>OHS</b>	Occupational Health and Safety
<b>ISO</b>	International Organization for Standardization
<b>NBC</b>	National Building Code



## Qualification Pack

### Glossary

<b>Sector</b>	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.
<b>Sub-sector</b>	Sub-sector is derived from a further breakdown based on the characteristics and interests of its components.
<b>Occupation</b>	Occupation is a set of job roles, which perform similar/ related set of functions in an industry.
<b>Job role</b>	Job role defines a unique set of functions that together form a unique employment opportunity in an organisation.
<b>Occupational Standards (OS)</b>	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.
<b>Performance Criteria (PC)</b>	Performance Criteria (PC) are statements that together specify the standard of performance required when carrying out a task.
<b>National Occupational Standards (NOS)</b>	NOS are occupational standards which apply uniquely in the Indian context.
<b>Qualifications Pack (QP)</b>	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.
<b>Unit Code</b>	Unit code is a unique identifier for an Occupational Standard, which is denoted by an 'N'
<b>Unit Title</b>	Unit title gives a clear overall statement about what the incumbent should be able to do.
<b>Description</b>	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.
<b>Scope</b>	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.
<b>Knowledge and Understanding (KU)</b>	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.



## Qualification Pack

<b>Organisational Context</b>	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.
<b>Technical Knowledge</b>	Technical knowledge is the specific knowledge needed to accomplish specific designated responsibilities.
<b>Core Skills/ Generic Skills (GS)</b>	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.
<b>Electives</b>	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.
<b>Options</b>	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.
<b>National Occupational Standard</b>	NOS defines the measurable performance outcomes required from an individual engaged in a particular task. They list down what an individual performing that task should know and also do.
<b>Qualification</b>	A formal outcome of an assessment and validation process which is obtained when a competent body determines that an individual has achieved learning outcomes to given standards
<b>Qualification File</b>	A Qualification File is a template designed to capture necessary information of a Qualification from the perspective of NSQF compliance. The Qualification File will be normally submitted by the awarding body for the qualification.
<b>Sector</b>	A grouping of professional activities on the basis of their main economic function, product, service or technology.
<b>Long Term Training</b>	Long-term skilling means any vocational training program undertaken for a year and above. <a href="https://ncvet.gov.in/sites/default/files/NCVET.pdf">https://ncvet.gov.in/sites/default/files/NCVET.pdf</a>