





# MODEL CURRICULUM

QP Name: Inspector (Advance Scaffold)

QP Code: SSD/Q0202

QP Version: 1.0

NSQF Level: 5

Model Curriculum Version: 1.0

# SAFETY SKILL DEVELOPMENT FOUNDATION (SSDF)

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# **Traini**

ng Parameters

Sectors	Construction, Infrastructure, Real estate, Iron & Steel, Mining
Sub-Sector	
Occupation	Scaffolding Engineering & Management
Country	India
NSQF Level	5
Aligned to NCO/ISCO/ISIC Code	NCO-2015/2141.0100; Works Inspector, Engineering/Inspection Engineer
Minimum Educational Qualification and Experience	Completed UG with science with 3-year experience in relevant field OR Completed 3-year diploma after 10th with 4.5-year experience in relevant field OR Completed 2-year NTC after 10 <sup>th</sup> with 5.5-year experience of relevant experience OR Previous relevant qualification of NSQF level 4.5 with 1.5-year experience
Pre-Requisite License or Training	Nil
Minimum Job Entry Age	18 years
Last Reviewed On	31-01-2024
Next Review Date	31-01-2027
Version	1.0
NSQC Approval Date	31-01-2024





Model Curriculum Creation Date	31-01-2024
Model Curriculum Valid Up to Date	31-01-2027
Model Curriculum Version	1.0
Minimum Duration of the Course	660 Hours
Maximum Duration of the Course	660 Hours





# **Program Overview**

This section summarizes the end objectives of the program along with its duration.

# **Training Outcomes**

After completing the program, the participant will be able to:-

- Identify the scaffold components, fall protections & load classification of scaffold components.
- Understand scaffold drawings, working details provided and fall protections.
- Carry inspection as per design details & prepare documents.
- Carryout inspection of supported scaffolds for all scaffoldings including supported, mobile, cantilever, suspended scaffoldings
- Know & understand the international practices in design & prepare inspection documents.
- Plan and organize scaffold inspections.
- Advise & implement safe working practices while erecting scaffolds.

# **Compulsory Modules**

The table lists the modules and their duration corresponding to the Compulsory NOS of the QP.

NOS and Module Details	Theor y Durati on	Practical Duration	On-the-Job Training Duration (Mandatory )	On-the-Job Training Duration (Recommended)	Total Duration
SSD/N0211, v 1.0:	60:00	40:00	20:00 Hours	00:00 Hours	120:00
Scaffoldings &	Hours	Hours			Hours
Specifications.					
Module 1: Introduction to	04:00	00:00	00:00 Hours	00:00 Hours	04:00
Training Program, Overview,	Hours	Hours			Hours
role of Scaffold Inspector and					
opportunities in Industries.					





Module 2: Types of scaffoldings, their components, specifications, uses under specific conditions and protections for safe use.	56:00 Hours	40:00 Hours	20:00 Hours	00:00 Hours	116:00 Hours
SSD/N0212, v 1.0 : Scaffold Drawings & Designs	30:00 Hours	20:00 Hours	10:00 Hours	00:00 Hours	60:00 Hours
Module 3: Read & understand the scaffolding drawings, codal provisions in designing, design factors, load calculations and design of supported scaffoldings up to a height of 20 meters.	30:00 Hours	20:00 Hours	10:00 Hours	00:00 Hours	60:00 Hours
SSD/N0207, v 1.0 : Advance Scaffold Designs	45:00 Hours	35:00 Hours	10:00 Hours	00:00 Hours	90:00 Hours
Module 4: Read & understand the scaffolding drawings, codal provisions in designing and design of all kind of scaffoldings including cantilever & suspended scaffoldings having height up to or more than 20 meters	45:00 Hours	35:00 Hours	10:00 Hours	00:00 Hours	90:00 Hours





SSD/N0208, v 1.0:	60:00	40:00	20:00 Hours	00:00 Hours	120:00
Advance Scaffold Inspection & Documentation	Hours	Hours			Hours
Documentation	60:00	40:00	20:00 Hours	00:00 Hours	120:00
Module 5: Understanding compliance of design, safety of scaffolding platform, process to be followed & documentation to be maintained during & after the inspection process of the scaffolds.	Hours	Hours	20.00 1.00.0		Hours
SSD/N0209, v 1.0 :	45:00	25:00	20:00 Hours	00:00 Hours	90:00
Advance International Practices & Designs in Scaffoldings	Hours	Hours			Hours
Module 6: International practices in drawings, designs of scaffolds and various codal provisions followed in designing of scaffolds, specifications given.	45:00 Hours	25:00 Hours	20:00 Hours	00:00 Hours	90:00 Hours
SSD/N0210, v 1.0: Plan, Organize & Monitor	30:00 Hours	25:00 Hours	05:00 Hours	00:00 Hours	60:00 Hours
Module 7: Planning, organizing and monitoring of their work to provide the expected outcomes efficiently & ensuring quality of the work.	30:00 Hours	25:00 Hours	05:00 Hours	00:00 Hours	60:00 Hours
SSD/N0206, v 1.0 : Work with Safety, Health & Environment	30:00 Hours	25:00 Hours	05:00 Hours	00:00 Hours	60:00 Hours





Module 8: Personal and co- worker's safety, health & environmental protocols and measures while carrying out work/inspection.	30:00 Hours	25:00 Hours	05:00 Hours	00:00 Hours	60:00 Hours
DGT/VSQ/N0102: Employability Skills	30:00 Hours	30:00 Hours	00:00 Hours	00:00 Hours	60:00 Hours
Module 9: Understand scope in employment, financial dealing, digital literacy and communication with employer or customer	30:00 Hours	30:00 Hours	00:00 Hours	00:00 Hours	60:00 Hours
<b>Total Duration</b>	330:00 Hours	240:00 Hours	90:00 Hours	00:00 Hours	660:00 Hours





# Modul e Details

Module 1: Introduction to Training Program, Overview, role of Scaffold Inspector and opportunities in Industries.

*Mapped to SSD/N0211,* v 1.0

- Discuss role of Scaffold Inspector & Sectors.
- Employment opportunities, career development & International opportunities.
- Course approach, duration, training & assessment processes.

<b>Duration</b> : <i>04:00</i>	<b>Duration</b> : <i>00:00</i>
Theory–Key Learning Outcomes	Practical–Key Learning Outcomes
Role & Description of Advance Scaffold Inspector.	
Career progression in the occupation.	
<ul> <li>Industries for Employment &amp; international opportunities for employment.</li> </ul>	
Training approach & methodology.	
<ul> <li>Assessment process &amp; Certification.</li> </ul>	
The assistance provided by AB/TP/LMIS in employment.	
Classroom Aids:	
Black/White Board, Computer, Projection Equipm Facilitator's Guide, Participant's Handbook.	nent, PowerPoint Presentation and software,
Tools, Equipment and Other Requirements	
Nil	





Module 2: Types of scaffoldings, their components, specifications, uses under specific conditions and protections for safe use.

Mapped to SSD/N0211, v 1.0

- Identification of scaffold & components
- Design load calculation of the scaffold
- Fall protection requirements & provisions in the scaffold.

Duration: 56 Hours	Duration: 40 Hours
Theory–Key Learning Outcomes	Practical–Key Learning Outcomes
<ul> <li>Scaffold terminologies for various scaffoldings.</li> <li>Different types of Scaffoldings.</li> <li>Parts of different Scaffoldings.</li> <li>Uses &amp; Suitability of Scaffoldings under different conditions &amp; heights for supported &amp; mobile scaffoldings up to 20 meters.</li> <li>Load classes of different Scaffoldings &amp; design load calculation.</li> <li>Calculation of loads on scaffolding &amp; optimum load.</li> <li>Types of fall protections in scaffolds.</li> <li>Working out requirements of Scaffolding parts.</li> <li>Regulations and approved codes of Practices.</li> <li>Working out fall protection requirements for the scaffold.</li> </ul>	<ul> <li>Understand Scaffold terminologies</li> <li>Identify of scaffold requirement</li> <li>Calculate design load of the scaffold</li> <li>Work out falls protection requirements &amp; provisions required in the scaffold.</li> </ul>





- Process of scaffolding erection, safety measures & precautions during use of scaffoldings up to a height of 20 meters.
- Introduction to International specifications of scaffoldings in use.

Black/White Board, Computer, Projection Equipment, PowerPoint Presentation and software, Facilitator's Guide, Participant's Handbook.

#### **Tools, Equipment and Other Requirements**

Podge spanner, Ring spanner, Open-End Spanner, Claw hammer, Mash hammer, Vernier caliper, Hack saw blade with frame, Line string, Knife, Wheel pulley, Drilling machine, Adjustable screw jack base plate, Spigot with bolts and nuts, H-frame Scaffold, Cup Lock System Scaffold (vertical, ledger, transom), Ring Lock system Scaffold, Cross bracings, Extension pipes, Sole boards, GI Pipe 48.3 mm OD, 4mm thick, Swivel coupler, Right angle coupler, Putlog coupler, Sleeve coupler, Stairway set (including all components), Ladder 6.0 mt, Ladder 3.0 mt, Ladder clamps(Suitable to ladder), Toe guard, Wooden planks, Staircase tower scaffold with components (as per manufacturer), Mobile tower scaffold with components (as per manufacturer), Lifting appliances (wheel and rope), Wheelbarrows, Safety Net, Steel scale, Try square, Spirit level, Plumb bob, Measuring tape, Safety Helmet, Face shield, Safety goggles, Safety shoes, Safety belt, Safety Harness, Ear defenders, Particle masks, Knee pad, Reflective jackets, Pencil, Cotton Hand - Gloves, Tools Bag, message boards, Fire Extinguishers, Sand buckets, Barricading tape





Module 3: Read & understand the scaffolding drawings, codal provisions in designing, design factors, load calculations and design of supported scaffoldings up to a height of 20 meters

# Mapped to SSD/N0212, v 1.0

- Reading & Understanding scaffold drawings
- Scaffold requirement & design of supported scaffold up to 20-meter height.
- Identification of fall protection & design

Duration: 30 Hours	Duration: 20 Hours
Theory–Key Learning Outcomes	Practical–Key Learning Outcomes
Understanding scaffold drawings.	<ul> <li>Read &amp; understand scaffold drawings &amp; markings.</li> </ul>
Scaffold Drawing Components	<ul> <li>Understand design of supported scaffold up</li> </ul>
Scaffold drawings (Plans & Elevations).	to 20-meter height.
Scaffold component drawings & sections.	Design protection & provisions against fall.
<ul> <li>Scaffold Design Overview &amp; Interpreting Drawings</li> </ul>	
Basic Design factors of Scaffolding and structural mathematics.	
<ul> <li>National Statutory Requirements &amp; Codes of Practices</li> </ul>	
BOCW Act & Rules -1996 and OHS code 2020	
<ul> <li>Understanding of Indian scaffold codes for design.</li> </ul>	
■ IS 3696-1&2	
■ IS 4014-1&2	
• IS 2750	
<ul> <li>Supported &amp; mobile scaffold design as per Indian codes up to 20 meters height.</li> </ul>	





- Design Process of scaffold as per load classifications up to 20 meters height.
- Design of scaffold platforms.
- Parameters affecting design & measures to be taken for scaffolds up to 20 meters height.
- Working out details of fall protections
- Design fall protections & parameters affecting it.
- Ladders/Temporary ladders requirements.

Black/White Board, Computer, Projection Equipment, MS office & Design & drafting software, Facilitator's Guide, Participant's Handbook.

# **Tools, Equipment and Other Requirements**

Podge spanner, Ring spanner, Open-End Spanner, Claw hammer, Mash hammer, Vernier caliper, Hack saw blade with frame, Line string, Knife, Wheel pulley, Drilling machine, Adjustable screw jack base plate, Spigot with bolts and nuts, H-frame Scaffold, Cup Lock System Scaffold (vertical, ledger, transom), Ring Lock system Scaffold, Cross bracings, Extension pipes, Sole boards, GI Pipe 48.3 mm OD, 4mm thick, Swivel coupler, Right angle coupler, Putlog coupler, Sleeve coupler, Stairway set (including all components), Ladder 6.0 mt, Ladder 3.0 mt, Ladder clamps(Suitable to ladder), Toe guard, Wooden planks, Staircase tower scaffold with components (as per manufacturer), Mobile tower scaffold with components (as per manufacturer), Lifting appliances (wheel and rope), Wheelbarrows, Safety Net, Steel scale, Try square, Spirit level, Plumb bob, Measuring tape, Safety Helmet, Face shield, Safety goggles, Safety shoes, Safety belt, Safety Harness, Ear defenders, Particle masks, Knee pad, Reflective jackets, Pencil, Cotton Hand - Gloves, Tools Bag, message boards, Fire Extinguishers, Sand buckets, Barricading tape





Module 4: Read & understand the scaffolding drawings, codal provisions in designing and design of all kind of scaffoldings including cantilever & suspended scaffoldings having height up to or more than 20 meters

# Mapped to SSD/N0207, v 1.0

- Reading & Understanding scaffold drawings
- Scaffold requirement & design of supported scaffold up to 20-meter height.
- Identification of fall protection & design

<b>Duration: 45 Hours</b>	Duration: 35 Hours
Theory–Key Learning Outcomes	Practical–Key Learning Outcomes
<ul> <li>Understanding scaffold drawings scaffolds drawings of scaffolds of more than 20 meters height and cantilever &amp; suspended scaffolds.</li> <li>Scaffold drawing components including scaffolds more than 20-meter height, cantilever &amp; suspended scaffolds.</li> <li>Scaffold drawings (Plans &amp; Elevations).</li> <li>Scaffold component drawings &amp; sections.</li> <li>Scaffold design Overview &amp; Interpreting Drawings</li> <li>Basic design factors of Scaffolding of more than 20-meter height, cantilever &amp; suspended scaffolds and structural mathematics.</li> <li>National Statutory Requirements &amp; Codes of Practices</li> <li>BOCW Act &amp; Rules -1996 and OHS code 2020</li> <li>Understanding of Indian scaffold codes for design.</li> <li>IS 3696-1&amp;2</li> </ul>	<ul> <li>Read &amp; understand scaffold drawings &amp; markings.</li> <li>Understand design of supported scaffold for more than 20 meter high.</li> <li>Understand design of cantilever &amp; suspended of mobile scaffoldings</li> <li>Design protection &amp; provisions against fall.</li> </ul>





- IS 4014-1&2
- IS 2750
- Cantilever & suspended scaffolds design as per Indian codes up to 20 meters height.
- Design Process of scaffold as per load classifications more than 20 meters height and cantilever & suspended scaffolds.
- Design of scaffold platforms.
- Parameters affecting design & measures to be taken for scaffolds for more than 20 meters height and cantilever & suspended scaffolds.
- Working out details of fall protections
- Design fall protections & parameters affecting it.
- Ladders/Temporary ladders requirements.

Black/White Board, Computer, Projection Equipment, MS office & Design & drafting software, Facilitator's Guide, Participant's Handbook.

# **Tools, Equipment and Other Requirements**

Podge spanner, Ring spanner, Open-End Spanner, Claw hammer, Mash hammer, Vernier caliper, Hack saw blade with frame, Line string, Knife, Wheel pulley, Drilling machine, Adjustable screw jack base plate, Spigot with bolts and nuts, H-frame Scaffold, Cup Lock System Scaffold (vertical, ledger, transom), Ring Lock system Scaffold, Cross bracings, Extension pipes, Sole boards, GI Pipe 48.3 mm OD, 4mm thick, Swivel coupler, Right angle coupler, Putlog coupler, Sleeve coupler, Stairway set (including all components), Ladder 6.0 mt, Ladder 3.0 mt, Ladder clamps(Suitable to ladder), Toe guard, Wooden planks, Staircase tower scaffold with components (as per manufacturer), Mobile tower scaffold with components (as per manufacturer), Lifting appliances (wheel and rope), Wheelbarrows, Safety Net, Steel scale, Try square, Spirit level, Plumb bob, Measuring tape, Safety Helmet, Face shield, Safety goggles, Safety shoes, Safety belt, Safety Harness, Ear defenders, Particle masks, Knee pad, Reflective jackets, Pencil, Cotton Hand - Gloves, Tools Bag, message boards, Fire Extinguishers, Sand buckets, Barricading tape





Module 5: Understanding compliance of design, safety of scaffolding platform, process to be followed & documentation to be maintained during & after the inspection process of the scaffolds.

# Mapped to SSD/N0208, v 1.0

- Safety & Design check during inspection to prevent any accident during its use.
- Inspection of scaffold after erection before opening for use.
- Documents to be prepared and maintained in scaffold inspection.

Duration: 60 Hours	<b>Duration: 40 Hours</b>
Theory–Key Learning Outcomes	Practical–Key Learning Outcomes
Checking points of scaffold design.	Safety & Design check.
Checking safety elements of the scaffold.	<ul> <li>Inspect scaffold after erection for safety &amp; safety measures.</li> </ul>
<ul> <li>Overview of fall prevention in scaffolding and work at height.</li> </ul>	<ul> <li>Prepare documents after scaffold</li> </ul>
Overview of safety regulations.	inspection.
Safety signs of the scaffold.	
Advanced scaffolding component information	
<ul> <li>Review of basic scaffolding structures up to a height of 20 meters</li> </ul>	





- Inspection criteria of scaffolding structures (including):
  - Supported/Independent
  - Mobile scaffolds
  - Shores (Dead, Raking, Flying)
  - Ramps & Gangways
- Scaffold inspection in-practice and field exercises.
- Best practices while using scaffolds
- Scaffold inspection checklists
- Inspection report preparation & report submission.

Black/White Board, Computer, Projection Equipment, MS office & Design & drafting software, Facilitator's Guide, Participant's Handbook.

#### **Tools, Equipment and Other Requirements**

Podge spanner, Ring spanner, Open-End Spanner, Claw hammer, Mash hammer, Vernier caliper, Hack saw blade with frame, Line string, Knife, Wheel pulley, Drilling machine, Adjustable screw jack base plate, Spigot with bolts and nuts, H-frame Scaffold, Cup Lock System Scaffold (vertical, ledger, transom), Ring Lock system Scaffold, Cross bracings, Extension pipes, Sole boards, GI Pipe 48.3 mm OD, 4mm thick, Swivel coupler, Right angle coupler, Putlog coupler, Sleeve coupler, Stairway set (including all components), Ladder 6.0 mt, Ladder 3.0 mt, Ladder clamps(Suitable to ladder), Toe guard, Wooden planks, Staircase tower scaffold with components (as per manufacturer), Mobile tower scaffold with components (as per manufacturer), Lifting appliances (wheel and rope), Wheelbarrows, Safety Net, Steel scale, Try square, Spirit level, Plumb bob, Measuring tape, Safety Helmet, Face shield, Safety goggles, Safety shoes, Safety belt, Safety Harness, Ear defenders, Particle masks, Knee pad, Reflective jackets, Pencil, Cotton Hand - Gloves, Tools Bag, message boards, Fire Extinguishers, Sand buckets, Barricading tape

Module 6: International practices in drawings, designs of scaffolds and various codal provisions





# followed in designing of scaffolds, specifications given.

# Mapped to SSD/N0209, v 1.0

- International practices in design of scaffolds.
- International standard, codes & drawings in scaffolding.
- Inspection & documents preparation in inspection.

<b>Duration: 45 Hours</b>	Duration: 25 Hours
Theory–Key Learning Outcomes	Practical–Key Learning Outcomes
International specifications of scaffoldings.	Identify best practices in design of scaffolds.
<ul> <li>Understanding of UK, European, American &amp; Australian design codes for scaffolds.</li> </ul>	<ul> <li>Compare standards being followed vis a vis international standard practices in</li> </ul>
BS EN-12810/11/12 & EN 74	scaffolding.
■ NASC - TG20-13	<ul> <li>Inspection process &amp; documents preparation required in inspection.</li> </ul>
• SG4-10, SG6	required in inspection.
• OSHA, USA (29 CFR 1926.451)	
<ul> <li>International Best Practices &amp; Industry Standards (NASC)</li> </ul>	
<ul> <li>UK /Europe</li> </ul>	
• USA	
<ul><li>Australia</li></ul>	
<ul> <li>Gulf Countries</li> </ul>	
<ul> <li>International Statutory Requirements in scaffolding.</li> </ul>	
Scaffold load calculation.	
Fall protections in scaffold.	





- Inspection processes.
- Inspection report preparation & submission.
- Ladders/temporary ladders & their requirements.

Black/White Board, Computer, Projection Equipment, MS office & Design & drafting software, Facilitator's Guide, Participant's Handbook.

#### **Tools, Equipment and Other Requirements**

Podge spanner, Ring spanner, Open-End Spanner, Claw hammer, Mash hammer, Vernier caliper, Hack saw blade with frame, Line string, Knife, Wheel pulley, Drilling machine, Adjustable screw jack base plate, Spigot with bolts and nuts, H-frame Scaffold, Cup Lock System Scaffold (vertical, ledger, transom), Ring Lock system Scaffold, Cross bracings, Extension pipes, Sole boards, GI Pipe 48.3 mm OD, 4mm thick, Swivel coupler, Right angle coupler, Putlog coupler, Sleeve coupler, Stairway set (including all components), Ladder 6.0 mt, Ladder 3.0 mt, Ladder clamps(Suitable to ladder), Toe guard, Wooden planks, Staircase tower scaffold with components (as per manufacturer), Mobile tower scaffold with components (as per manufacturer), Lifting appliances (wheel and rope), Wheelbarrows, Safety Net, Steel scale, Try square, Spirit level, Plumb bob, Measuring tape, Safety Helmet, Face shield, Safety goggles, Safety shoes, Safety belt, Safety Harness, Ear defenders, Particle masks, Knee pad, Reflective jackets, Pencil, Cotton Hand - Gloves, Tools Bag, message boards, Fire Extinguishers, Sand buckets, Barricading tape

Module 7: Planning, organizing and monitoring of their work to provide the expected outcomes efficiently & ensuring quality of the work.

# Mapped to SSD/N0210, v 1.0

- Planning of resources for own work and communication to concerned subordinates, co-workers, and superiors.
- Provide necessary support to subordinates, coordinate with co-workers and liaise with superiors and other teams.
- Monitor progress of work and adjust, manage or project requirements on time.





<b>Duration: 30 Hours</b>	<b>Duration: 25 Hours</b>
Theory–Key Learning Outcomes	Practical–Key Learning Outcomes
<ul><li>Basic concepts of planning &amp; organizing.</li><li>Planning of resources.</li></ul>	<ul> <li>Plan resources for own work &amp; communication to all involved subordinates, co-workers and superiors.</li> </ul>
Concept of resources requirement optimization.	<ul> <li>Provide necessary support to subordinates, coordinate with co-workers.</li> </ul>
Scheduling of activities as per time plan.	Monitor progress and completion of
<ul> <li>Understanding hierarchy of the organization.</li> <li>Communication to co-workers &amp;</li> </ul>	inspection as per project requirement & on time.
subordinates.	
Reporting process & record maintenance.	
<ul> <li>Checklist and resource availability as per schedule.</li> </ul>	
Procurements/acquisitions.	
Briefing & tool-box talk.	
Monitoring of resources & reporting.	
<ul> <li>Statutory &amp; quality compliances and record preparation.</li> </ul>	
Record keeping & displays.	
Classroom Aids:	

Black/White Board, Computer, Projection Equipment, MS office & Design & drafting software, Facilitator's Guide, Participant's Handbook.

# **Tools, Equipment and Other Requirements**





Podge spanner, Ring spanner, Open-End Spanner, Claw hammer, Mash hammer, Vernier caliper, Hack saw blade with frame, Line string, Knife, Wheel pulley, Drilling machine, Adjustable screw jack base plate, Spigot with bolts and nuts, H-frame Scaffold, Cup Lock System Scaffold (vertical, ledger, transom), Ring Lock system Scaffold, Cross bracings, Extension pipes, Sole boards, GI Pipe 48.3 mm OD, 4mm thick, Swivel coupler, Right angle coupler, Putlog coupler, Sleeve coupler, Stairway set (including all components), Ladder 6.0 mt, Ladder 3.0 mt, Ladder clamps(Suitable to ladder), Toe guard, Wooden planks, Staircase tower scaffold with components (as per manufacturer), Mobile tower scaffold with components (as per manufacturer), Lifting appliances (wheel and rope), Wheelbarrows, Safety Net, Steel scale, Try square, Spirit level, Plumb bob, Measuring tape, Safety Helmet, Face shield, Safety goggles, Safety shoes, Safety belt, Safety Harness, Ear defenders, Particle masks, Knee pad, Reflective jackets, Pencil, Cotton Hand - Gloves, Tools Bag, message boards, Fire Extinguishers, Sand buckets, Barricading tape

Module 8: Personal and co-worker's safety, health & environmental protocols and measures while carrying out work/inspection.

#### Mapped to SSD/N0206, v 1.0

- Safety measures to minimize any incident or accidents, use of personal safety equipment and emergency drills.
- Healthy habits, maintenance of clean & healthy areas and healthy working relations among co-workers and subordinates. .
- Safe disposal of waste materials to minimize adverse effect on environment & re-use.

Duration: 30 Hours	Duration: 25 Hours		
Theory–Key Learning Outcomes	Practical–Key Learning Outcomes		
<ul> <li>Emergency situations &amp; evacuation process.</li> <li>Displaying methods of emergency protocols &amp; signs.</li> </ul>	<ul> <li>Identify, brief &amp; ensure safety measures, use of personal safety equipment and identify emergency drills.</li> </ul>		
<ul> <li>Personal protective equipment &amp; its use.</li> <li>Safe storing of tools, equipment &amp; materials.</li> </ul>	Plan healthy habits, clean & healthy area maintenance and healthy working relations among co-workers.		





- Safe uses of tools, equipment & materials as per safety guidelines.
- Types of health hazards and its identification.
- Measures against health hazards.
- Means to keep the work area clean & avoid health hazards.
- Types of sanitation problems and measures against it.
- Personal hygiene.
- Interpersonal behavior.
- Communication to co-workers & subordinates.
- Leadership & guidance.
- Measures to minimize wastage of resources.
- Disposal of waste & left-over materials.
- Disposal of plastic and hazardous materials.
- Reporting of safety & health issues to superiors.
- Recording of compliances.
- Record maintenance

 Plan & ensure safe disposal of waste materials and minimize adverse effects on the environment.

# Classroom Aids:

Black/White Board, Computer, Projection Equipment, MS office & Design & drafting software, Facilitator's Guide, Participant's Handbook.

# **Tools, Equipment and Other Requirements**





Podge spanner, Ring spanner, Open-End Spanner, Claw hammer, Mash hammer, Vernier caliper, Hack saw blade with frame, Line string, Knife, Wheel pulley, Drilling machine, Adjustable screw jack base plate, Spigot with bolts and nuts, H-frame Scaffold, Cup Lock System Scaffold (vertical, ledger, transom), Ring Lock system Scaffold, Cross bracings, Extension pipes, Sole boards, GI Pipe 48.3 mm OD, 4mm thick, Swivel coupler, Right angle coupler, Putlog coupler, Sleeve coupler, Stairway set (including all components), Ladder 6.0 mt, Ladder 3.0 mt, Ladder clamps(Suitable to ladder), Toe guard, Wooden planks, Staircase tower scaffold with components (as per manufacturer), Mobile tower scaffold with components (as per manufacturer), Lifting appliances (wheel and rope), Wheelbarrows, Safety Net, Steel scale, Try square, Spirit level, Plumb bob, Measuring tape, Safety Helmet, Face shield, Safety goggles, Safety shoes, Safety belt, Safety Harness, Ear defenders, Particle masks, Knee pad, Reflective jackets, Pencil, Cotton Hand - Gloves, Tools Bag, message boards, Fire Extinguishers, Sand buckets, Barricading tape

Module 9: Understand scope in employment, financial dealing, digital literacy and communication with employer or customer

Mapped to to DGT/VSQ/N0102

- Describe the traits of individual at workplace
- Demonstrate apply employability and entrepreneurship skills at workplace

Duration: 30:00 Duration: 30:00			
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes		
<ul> <li>Discuss the importance of Employability         Skills in meeting the job requirements.</li> <li>Explain constitutional values, civic         rights, duties, citizenship, responsibility         towards society etc. that are required to         be followed to become a responsible         citizen.</li> </ul>	<ul> <li>Show how to practice different environmentally sustainable practices</li> <li>Use appropriate basic English sentences/phrases while speaking</li> <li>Demonstrate how to communicate in a well -mannered way with others</li> <li>Demonstrate working with others in a</li> </ul>		
<ul> <li>Discuss 21st century skills.</li> <li>Display positive attitude, self - motivation, problem solving, time management skills and continuous</li> </ul>	<ul> <li>Show how to conduct oneself appropriately with all genders and PwD</li> <li>Show how to operate digital devices and</li> </ul>		





learning mindset in different situations.

- Discuss the significance of reporting sexual harassment issues in time
- Discuss the significance of using financial products and services safely and securely.
- Explain the significance of approaching the concerned authorities in time for any exploitation as per legal rights and laws
- Explain the importance of managing expenses, income, and savings.
- Discuss the significance of using internet for browsing, accessing social media platforms, safely and securely
- Discuss the need for identifying opportunities for potential business, sources for arranging money and potential legal and financial challenges
- Differentiate between types of customers
- Explain the significance of identifying customer needs and addressing them
- Discuss the significance of maintaining hygiene and dressing appropriately
- Discuss the significance of dressing up neatly and maintaining hygiene for an interview
- Discuss how to search and register for apprenticeship opportunities

use the associated applications and features, safely and securely

- Create a biodata
- Use various sources to search and apply for jobs

# **Classroom Aids:**

 Black/White Board, Computer, Projection Equipment, PowerPoint Presentation and software, Facilitator's Guide, Participant's Handbook.

# **Tools, Equipment and Other Requirements**

• Laptop/computer, internet, mobile

On The Job Training Plan: Advance Scaffold Inspector





# Design Load & Fall Protection Requirement: 20 hours

# **Key Learning Outcomes**

- Identify of scaffold requirement
- Calculate design load of the scaffold
- Work out falls protection requirements & provisions required in the scaffold.

Scaffold Drawing & Design: 20 hours

#### **Key Learning Outcomes**

- Understand & work out design of supported scaffolds of any height
- Understand & work out design of mobile, supported and suspended scaffolds
- Work out falls protection requirements & safety provisions required in the scaffold.

Carry out inspection of scaffold: 20 hours

#### **Key Learning Outcomes**

- Safety & Design check.
- Inspection of scaffold after erection.
- Prepare documents after scaffold inspection.

Best practices as per international standard in scaffold: 20 hours

# **Key Learning Outcomes**

- Identify best practices in design of scaffolds.
- Compare standards being followed vis a vis international standard practices in scaffolding.
- Inspection process & documents preparation required in inspection.

Planning of Inspection: 5 hours

**Key Learning Outcomes** 





- Plan resources for own work & communication to all involved subordinates, co-workers and supe
- Provide necessary support to subordinates, coordinate with co-workers.
- Monitor progress and completion of inspection as per project requirement & on time.

# Safety & Health & Environment Assurance: 5 hours

# **Key Learning Outcomes**

- Identify, brief & ensure safety measures, use of personal safety equipment and identify emergen drills.
- Plan healthy habits, clean & healthy area maintenance and healthy working relations among co-
- Plan & ensure safe disposal of waste materials and minimize adverse effects on the environment.

Total Duration of OJT – 90 Hours ( 2 weeks)





# **Annexure**

# **Trainer Requirements**

Trainer Prerequisites						
Minimum Educational	Specialization	Relevant Industry Experience		Training Experience		Remar ks
Qualification		Years	Specialization	Years	Specializati on	
ITI/12 <sup>th</sup> Pass	Any domain	12	Scaffolding/Safety Domain	0	-	
Graduate in any discipline / Diploma in Engineering	Construction, Mechanical, Manufacturing, Mining, Production & Industrial Engineering, Mathematics, Physics degree and others	7	Scaffolding/Safety Domain	0	-	
M. Tech/ B. Tech	Construction, Mechanical, Manufacturing, Mining, Production & Industrial Engineering, Mathematics, Physics degree and others	4	Scaffolding/Safety Domain	0	-	





Trainer Certification					
Domain Certification	Platform Certification				
Certified as Trainer for the Job Role"SSD/Q0202 v1.0: Inspector (Advance Scaffold)" or higher qualification as per career progression by SSDF. The minimum accepted score is 80%.	Recommended that the Assessor is certified for the Job Role: "Trainer (VET and Skills)", mapped to the Qualification Pack: "MEP/Q2601 v2.0". The minimum accepted score is 80%.				





**Assessor Requirements** 

Assesso	r Requirements					
	Assessor Prerequisites					
Minimum Educational	Specialization	Relevant Industry Experience		Training/Assessmen t Experience		Remarks
Qualification		Years	Specialization	Years	Specialization	
ITI/12 <sup>th</sup> Pass	Any domain	12	Scaffolding /Safety Domain	0		<u> </u>
Graduat e in any disciplin e / Diplom a in Enginee ring	Construction,, Mechanical, Manufacturing, Mining, Production & Industrial Engineering, Mathematics, Physics degree and others	7	Scaffolding /Safety Domain	0		
M. Tech/ B. Tech	Construction,, Mechanical, Manufacturing, Mining, Production & Industrial Engineering, Mathematics, Physics degree and others	4	Scaffolding /Safety Domain	0	-	

Assessor Certification			
Domain Certification	Platform Certification		
Certified as assessor for the QP: "SSD/Q0202 v1.0: Inspector (Advance Scaffold)" or higher qualification as per career progression. The minimum accepted score is 80%.	Recommended that the Assessor is certified for the Job Role: "Assessor (VET and Skills)", mapped to the Qualification Pack: "MEP/Q2701 v2.0". The minimum accepted score is 80%.		





# **Assessment Strategy**

The assessment will be based on the concept of third-party assessments through certified assessors with empanelled Assessment Agencies of NCVET. The certification of each assessor will be done by SSDF through a process of selection, training, assessment & certification through training of the assessor's program.

The assessments will include both formative & summative. The progressive assessments will be through a trainer during progress of the training. The summative assessments will be carried by the assessor through assessment agencies.

The assessment process will find whether the candidate or professional is competent or not to perform the job as per expected performance criteria. The assessment plan contains the following information:

- a) Assessment elements Competencies based on performance criteria of each NOS.
- b) Methods of assessment Written test (online/offline), viva and practical/ field exercises.
- c) Time of assessment The assessment will be done both formative and summative (post orientation/training) of candidates.
- d) Place i.e., context of the assessment The assessment will be conducted through theory, viva voce and practical/ field exercises, on simulators and will be both online or offline modes.
- e) The criteria for decision making— It will be based on assessment criteria & guidelines as given the qualification pack.
- f) Questions The written questions, viva & practical questions will be set to cover all aspects of performance criteria and would have been validated from experts in the subject matter.
- g) Passing criteria & gradings The passing criteria & gradings will be as per passing criteria given for each NOS and Guidelines for Assessment.





**Glossary** 

Term	Description
Declarative Knowledge	Declarative knowledge refers to facts, concepts and principles that need to Be known and/or understood in order to accomplish or to solve a problem.
Key Learning Outcome	Key learning outcome is the statement of what a learner needs to know, understand and be able to do in order to achieve the terminal outcomes. A set of key learning outcomes will make up the training outcomes. Training Outcome is specified in terms of knowledge, understanding(theory)and skills (practical application).
OJT(M)	On-the-job training(Mandatory);trainees are mandated to complete specified hours of training on site
OJT(R)	On-the-job training(Recommended);trainees are recommended the specified hours of training on site
Procedural Knowledge	Procedural knowledge addresses how to do something, or how to perform a task. It is the ability to work, or produce a tangible work output by applying cognitive, affective or psychomotor skills.
Training Outcome	Training outcome is a statement of what a learner will know, understand and be able to do upon the completion of the training.
Terminal Outcome	Terminal outcome is a statement of what a learner will know, understand and be able to do upon the completion of a module. A set of terminal outcomes help to achieve the training outcome.





**Acronyms and Abbreviations** 

Term	Description
QP	Qualification Pack
NSQF	National Skills Qualification Framework
NSQC	National Skills Qualification Committee
NOS	National Occupational Standard
AB	Awarding Body
AA	Assessment Agency
TP	Training Partner