



# Model Curriculum

**NOS Name:** Introduction to Roads Repair and Maintenance

**NOS Code:** ICE/CON/N0206

**Version:** 1.0

**NSQF Level:** 2

**Model Curriculum Version:** 1.0

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## Training Parameters

<b>Sector</b>	Construction		
<b>Sub-Sector</b>	Real Estate and Infrastructure Construction		
<b>Occupation</b>	Road and Highway Construction		
<b>Country</b>	India		
<b>NSQF Level</b>	2		
<b>Aligned to NCO/ISCO/ISIC Code</b>	NCO-2015/2142.0600		
<b>Minimum Educational Qualification and Experience</b>	<b>S. No.</b>	<b>Academic/Skill Qualification (with Specialization - if applicable)</b>	<b>Required Experience (with Specialization - if applicable)</b>
	1	Ability to Read and Write	
<b>Pre-Requisite License or Training</b>	Not Applicable		
<b>Minimum Job Entry Age</b>	As per Govt. Norms		
<b>Last Reviewed On</b>	07-10-2025		
<b>Next Review Date</b>	07-10-2028		
<b>NSQC Approval Date</b>	07-10-2025		
<b>QP Version</b>	1.0		
<b>Model Curriculum Creation Date</b>	07-10-2025		
<b>Model Curriculum Valid Up to Date</b>	07-10-2028		
<b>Model Curriculum Version</b>	1.0		
<b>Minimum Duration of the Course</b>	120 Hours		
<b>Maximum Duration of the Course</b>	120 Hours		

## Program Overview

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

### Training Outcomes:

At the end of the program, the learner should have acquired the listed knowledge and skills to:

- Understand why road repair and maintenance are important, how they help keep roads safe and usable, and how they benefit society by improving transport and connectivity.
- Identify different types of road maintenance, such as regular cleaning (routine), early prevention (preventive), fixing damages (corrective), and major repairs (rehabilitation), and explain when and why each is used.
- Explain the main goals of road maintenance, like making roads last longer, keeping them safe for users, and avoiding expensive repairs in the future.
- Recognize the common tasks and tools used in road maintenance, such as pothole filling, crack sealing, rollers, tampers, and safety equipment.
- Follow safety measures while working on roads, including wearing PPE like helmets and reflective vests, setting up traffic signs, and keeping the worksite safe.
- Check the condition of roads and decide the right maintenance action, using mock activities, visual inspection, and simple analysis.
- Keep track of maintenance work using logbooks or basic digital tools, helping with proper planning and future road care.
- Prepare basic maintenance plans and schedules, taking into account weather changes, traffic movement, and safety of road users

## Modules:

The table lists the modules and their duration corresponding to the Standalone NOS.

NOS and Module Details	Theory Duration (in Hours)	Practical Duration (in Hours)	On-the-Job Training Duration (Mandatory) (in Hours)	On-the-Job Training Duration (Recommended) (in Hours)	Total Duration (in Hours)
<b>ICE/CON/N0206:</b> <b>Introduction to Roads Repair and Maintenance</b> <b>NOS Version: 1.0</b> <b>NSQF Level: 2</b>	<b>45:00</b>	<b>55:00</b>	<b>20:00</b>	<b>00:00</b>	<b>120:00</b>
Module 1: Introduction to the Purpose & Importance of Road Repair and Maintenance	02:00	02:00	01:00	00:00	05:00
Module 2: Types of Road Maintenance Work	08:00	10:00	04:00	00:00	22:00
Module 3: Supporting Common Road Maintenance Activities	08:00	10:00	04:00	00:00	22:00
Module 4: Tools used in Common Road Repair and Maintenance Activities	12:00	13:00	03:00	00:00	28:00
Module 5: Importance of Routine Maintenance of Roads	07:00	10:00	04:00	00:00	21:00
Module 6: Safety at Road Work Zones and Maintenance	08:00	10:00	04:00	00:00	22:00
<b>Total Duration</b>	<b>45:00</b>	<b>55:00</b>	<b>20:00</b>	<b>00:00</b>	<b>120:00</b>



## Module Details

### Module 1: Introduction to the Purpose & Importance of Road Repair and Maintenance

Mapped to ICE/CON/N0206, v1.0

#### Terminal Outcomes:

- Explain the significance and scope of road repair and maintenance in civil infrastructure.
- Describe the relationship between road condition and transport safety and efficiency.
- Identify the economic and social impacts of well-maintained roads.

<b>Duration: 02:00</b>	<b>Duration: 02:00</b>
<b>Theory – Key Learning Outcomes</b>	<b>Practical – Key Learning Outcomes</b>
<ul style="list-style-type: none"> <li>• Explain how maintenance ensures safety and smooth transportation flow.</li> <li>• Identify causes of road damage (traffic, drainage failure, weather impact).</li> <li>• State benefits of timely repair (cost efficiency, longer road life).</li> <li>• Differentiate types of roads and their indicative maintenance needs.</li> <li>• Understand importance of durable materials for repairing roads.</li> </ul>	<ul style="list-style-type: none"> <li>• Observe and identify real road defects using sample surfaces/images.</li> <li>• Demonstrate recognition of early signs of road distress.</li> <li>• Follow verbal/written instructions related to road upkeep.</li> </ul>
<b>Classroom Aids</b>	
Training Kit - Trainer Guide, Presentations, Whiteboard, Marker, Projector, Laptop, Video Films	
<b>Tools, Equipment and Other Requirements</b>	
Visuals (images/videos) showing various road conditions, Flip charts or chart paper and markers for lifecycle cost chart creation, Sample road maintenance manuals or reports, Internet access (optional for live case examples), Video playback setup (for visual aids)	

## Module 2: Types of Road Maintenance Work

Mapped to ICE/CON/N0206, v1.0

### Terminal Outcomes:

- Identify and differentiate between various types of road maintenance.
- Explain the objectives and application of routine, preventive, corrective, and rehabilitation maintenance.

Duration: 08:00	Duration: 10:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> <li>Define routine maintenance as regular activities like sweeping, cleaning, and patching to keep roads serviceable.</li> <li>Explain preventive maintenance as planned actions (e.g., seal coating) aimed at avoiding deterioration before it begins.</li> <li>Discuss corrective maintenance as repairs executed after defects (e.g., cracks or potholes) have appeared.</li> <li>Define rehabilitation as significant repair activities that restore roads nearing the end of their service life.</li> <li>Explain reconstruction as the process of replacing road sections that are beyond repair.</li> <li>Illustrate the conditions or indicators that determine the type of maintenance required.</li> <li>Compare the short-term and long-term benefits of each type of maintenance approach.</li> <li>Highlight the cost and labour implications of each maintenance type.</li> <li>Provide examples of when each type is typically applied in urban and rural road contexts.</li> </ul>	<ul style="list-style-type: none"> <li>Match different maintenance types to real-life road scenarios.</li> <li>Simulate identification of maintenance type needed for sample road issues.</li> <li>Conduct mock assessments using photographs to decide the correct maintenance type.</li> </ul>
Classroom Aids	
Training Kit - Trainer Guide, Presentations, Whiteboard, Marker, Projector, Laptop, Video Films	
Tools, Equipment and Other Requirements	
Visuals (images/videos) showing various road conditions, Flip charts or chart paper and markers for lifecycle cost chart creation, Sample Road maintenance manuals or reports, Internet access (optional for live case examples), Video playback setup (for visual aids)	

## Module 3: Supporting Common Road Maintenance Activities

*Mapped to ICE/CON/N0206, v1.0*

### Terminal Outcomes:

- Describe the purpose of road repair and how it affects infrastructure longevity and public safety.
- Understand the objectives of planned and systematic road maintenance.

Duration: 08:00	Duration: 10:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> <li>List common road repair tasks: pothole filling, crack sealing, shoulder reshaping, and drainage cleaning.</li> <li>Describe the process of pothole patching and the materials used (bitumen, asphalt mixes).</li> <li>Explain the importance of crack sealing to prevent water infiltration and pavement damage.</li> <li>Identify the purpose of surface treatments like slurry seal and micro-surfacing.</li> <li>Describe the function and structure of roadside shoulders and their maintenance needs.</li> <li>Explain why drainage maintenance is critical to prevent water-related damage.</li> <li>List basic tools used: tampers, sealant applicators, rollers, shovels.</li> <li>Discuss machinery such as bitumen sprayers, compaction rollers, and patching trucks.</li> <li>Identify safety gear necessary for field workers: helmets, gloves, boots, reflective clothing.</li> </ul>	<ul style="list-style-type: none"> <li>Assist in cleaning and preparing damaged area using scraper/broom correctly.</li> <li>Apply crack sealant under guidance with correct thickness and coverage.</li> <li>Support manual pothole filling and levelling using shovel/trowel.</li> <li>Place road cones, barricades and detour signs maintaining correct distance and visibility rules.</li> <li>Maintain continuous housekeeping during operations to avoid trip hazards.</li> <li>Record breakdown or defects of hand tools to the supervisor.</li> </ul>
Classroom Aids	
Training Kit - Trainer Guide, Presentations, Whiteboard, Marker, Projector, Laptop, Video Films	
Tools, Equipment and Other Requirements	
Sample logbook formats (manual or digital), Time-lapse videos of road degradation due to lack of routine care, Maintenance cost comparison charts, Flipcharts and markers for analysis activities, Projector: video comparisons of damaged and proper roads	



## Module 4: Understanding Objectives & Benefits of Road Maintenance

*Mapped to ICE/CON/N0206, v1.0*

### Terminal Outcomes:

- Describe sustainable construction practices and waste management techniques.
- Explain emergency preparedness measures for fire, chemical spills and natural disasters.

Duration: 12:00	Duration: 13:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> <li>• Explain that the primary objective is to retain the road's original quality for as long as possible.</li> <li>• Discuss how road maintenance helps prevent accidents by ensuring better traction and visibility.</li> <li>• Describe the role of maintenance in protecting surrounding assets like utilities, slopes, and vegetation.</li> <li>• Explain how maintaining roads ensures comfort and convenience for commuters.</li> <li>• Analyze how proper maintenance saves public money by reducing frequent major repairs.</li> <li>• Explain the link between road condition and transportation efficiency (fuel economy, travel time).</li> <li>• Identify the contribution of maintenance in sustaining local economic activities, including supply chain continuity.</li> <li>• Describe the social impact of road maintenance, such as access to healthcare, education, and emergency services.</li> <li>• Highlight the importance of planning and budgeting to achieve these objectives effectively.</li> </ul>	<ul style="list-style-type: none"> <li>• Create a chart linking objectives to maintenance actions.</li> <li>• Prioritize maintenance goals for a given road scenario in group activity.</li> </ul>
<b>Classroom Aids</b>	
Training Kit - Trainer Guide, Presentations, Whiteboard, Marker, Projector, Laptop, Video Films	
<b>Tools, Equipment and Other Requirements</b>	
Sample cost-benefit data sheets, Case studies or real-world maintenance reports, Materials for group activity (sticky notes, charts, pens), Templates for objective-action linkage charts	

## Module 5: Importance of Routine Maintenance of Roads

*Mapped to ICE/CON/N0206, v1.0*

### Terminal Outcomes:

- Explain why regular and timely maintenance prevents major road failures.
- Identify how routine upkeep contributes to travel comfort and safety.

Duration: 07:00	Duration: 10:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> <li>• Define routine maintenance and its role in early damage detection.</li> <li>• Describe how small issues like cracks or water stagnation can lead to major failures if ignored.</li> <li>• Explain how regularly scheduled tasks prevent pavement degradation.</li> <li>• Discuss how routine maintenance maintains driving comfort and reduces user dissatisfaction.</li> <li>• Identify the cost-efficiency of routine maintenance compared to large-scale rehabilitation.</li> <li>• Highlight how routine efforts keep the road network serviceable during all weather conditions.</li> <li>• Explain how routine maintenance supports asset management systems and databases.</li> <li>• Describe the importance of integrating visual inspections and minor repairs in the work plan.</li> <li>• Discuss how public perception of government effectiveness is influenced by visible road maintenance.</li> </ul>	<ul style="list-style-type: none"> <li>• Conduct mock evaluations showing how early repairs avoid larger costs.</li> <li>• Create and analyze a basic maintenance logbook for a sample stretch of road.</li> <li>• Compare videos of well-maintained versus neglected roads to infer user experience.</li> </ul>
Classroom Aids	
Training Kit - Trainer Guide, Presentations, Whiteboard, Marker, Projector, Laptop, Video Films	
Tools, Equipment and Other Requirements	
Sample logbook formats (manual or digital), Time-lapse videos of road degradation due to lack of routine care, Maintenance cost comparison charts, Flipcharts and markers for analysis activities, Projector: video comparisons of damaged and proper roads	

## Module 6: Safety at Road Work Zones and Maintenance Planning

*Mapped to ICE/CON/N0206, v1.0*

### Terminal Outcomes:

- Apply safety practices and traffic control during road repair work.
- Understand the basics of maintenance planning and record-keeping.

Duration: 08:00	Duration: 10:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> <li>• Describe the key hazards faced during road repair (e.g., live traffic, heavy machinery, poor visibility).</li> <li>• Identify essential safety practices such as worksite zoning, flagging, and using barriers.</li> <li>• Explain the importance of using signs, cones, and high-visibility gear.</li> <li>• Describe basic first-aid and emergency protocols to be followed on-site.</li> <li>• Outline the process of recording maintenance activities (forms, logbooks, digital entries).</li> <li>• Introduce computerized maintenance systems and how they help track road conditions and schedules.</li> <li>• Explain how road condition surveys contribute to planning future maintenance.</li> <li>• Discuss how weather patterns and seasonal effects influence maintenance schedules.</li> <li>• Highlight the importance of communicating with traffic enforcement and the public during maintenance.</li> </ul>	<ul style="list-style-type: none"> <li>• Set up a mock roadwork zone with correct signage and layout.</li> <li>• Fill out sample maintenance records and daily work logs.</li> <li>• Create a weekly maintenance schedule based on mock road condition reports.</li> </ul>
Classroom Aids	
Training Kit - Trainer Guide, Presentations, Whiteboard, Marker, Projector, Laptop, Video Films	
Tools, Equipment and Other Requirements	
Safety signage: cones, flags, reflective barriers, Sample first-aid kit (demonstration use), High-visibility safety clothing (vests, helmets), Road condition survey forms, Maintenance scheduling templates (weekly/monthly formats), Props to simulate traffic diversion setup, Access to maintenance tracking software (if applicable)	

## On-the-Job Training

*Mapped to Introduction to Roads Repair and Maintenance, v1.0*

All the On-the-Job Training Program must be conducted only at On-Site of relevant Industry. The details mentioned below are NOS wise Terminal Outcomes of OJT Period.

<b>ICE/CON/N0206</b>	<b>Introduction to Roads Repair and Maintenance</b>
<b>Mandatory OJT duration (in Hours)</b>	<b>20:00</b>
<b>Terminal Outcomes:</b>	
<p>During the OJT period, the candidate will be able to:</p> <ul style="list-style-type: none"> <li>Identify and report real damaged locations to supervisor verbally and via log entry.</li> <li>Use maintenance terminology correctly (e.g., “edge break”, “alligator cracks”, “surface wear”).</li> <li>Observe how senior technicians plan repair order based on severity and traffic impact.</li> <li>Assist in selecting proper repair action for a real damaged stretch.</li> <li>Follow different instructions for different maintenance types (e.g., cleaning for routine vs sealing for preventive).</li> <li>Observe actual workflow of scheduling repairs based on weather &amp; traffic windows.</li> <li>Join a team-based small repair activity and assist throughout without abandoning task.</li> <li>Work synchronously with crew members during patching/resurfacing (material supplier, leveller, compactor personnel).</li> <li>Help restore safe traffic flow after repair by removing barricades correctly.</li> <li>Observe how supervisors prioritize repairs based on road user safety.</li> <li>Watch budgeting/allocation discussions and note how weather and traffic affect scheduling.</li> <li>Assist in day-to-day small maintenance tasks from start to finish.</li> <li>Report progress and task completion clearly to supervisor.</li> <li>Ensure handover of tools and unused materials at day end.</li> <li>Assist in filling actual maintenance log sheet and submit to supervisor.</li> <li>Collect material usage data from field team (bags, mix buckets, sealant quantity).</li> <li>Participate in pre-work toolbox talk / safety briefing.</li> <li>Assist schedule update by recording finished and pending stretches in checklist.</li> </ul>	

## Annexure

### Trainer Requirements

Minimum Educational Qualification	Specialization	Relevant Industry Experience		Preferable Training Experience	
		Years	Specialization	Years	Specialization
Graduation	B.E. / B. tech in Civil Engineering	1	Roads and Transportation	1	Roads and Transportation
OR					
Diploma	Civil Engineering	2	Roads and Transportation	1	Roads and Transportation

Trainer Certification	
Domain Certification	Platform Certification
Recommended that the Trainer is certified for the Standalone NOS: “ <i>Introduction to Roads Repair and Maintenance</i> ”, mapped to the Standalone NOS: “ICE/CON/N0206, v1.0”. The minimum accepted score is 80%.	Recommended that the Trainer is certified for the Job Role: “ <i>Trainer (VET and skills)</i> ”, mapped to the Qualification Pack: “MEP/Q2601, v3.0”. The minimum accepted score is 80%.

## Assessor Requirements

Minimum Educational Qualification	Specialization	Relevant Industry Experience		Preferable Training / Assessment Experience	
		Years	Specialization	Years	Specialization
Graduation	B.E. / B. tech in Civil Engineering	2	Roads and Transportation	1	Roads and Transportation
OR					
Diploma	Civil Engineering	3	Roads and Transportation	1	Roads and Transportation

Assessor Certification	
Domain Certification	Platform Certification
Recommended that the Assessor is certified for the Standalone NOS: “ <i>Introduction to Roads Repair and Maintenance</i> ”, mapped to the Standalone NOS: “ICE/CON/N0206, v1.0”. The minimum accepted score is 80%.	Recommended that the Assessor is certified for the Job Role: “ <i>Assessor (VET and skills)</i> ”, mapped to the Qualification Pack: “MEP/Q2701, v3.0”. The minimum accepted score is 80%.



## Assessment Strategy

This section includes the processes involved in identifying, gathering and interpreting information to evaluate the Candidate on the required competencies of the program.

### 1. Assessment System Overview:

Assessment is done through ICES affiliated Assessment Agencies. Assessors are trained & certified by ICES after Training of Assessor (ToA) program. Assessments are conducted to gauge and assess the trainee's skill and knowledge competency in the specified areas.

The assessment will have both theory, practical and viva components as per ratio specified in the Standalone NOS **Introduction to Roads Repair and Maintenance**.

During the practical task, trainees are assessed on their workmanship, quality of finished product and time management. They will be graded for all their assessments based on the approved assessment strategy which is signed off by ICES. The Assessor submits an assessment plan to ICES prior to assessments.

The assessment plan contains the following information:

- What will be assessed, i.e. the competency based on each NOS based on theory, practical and viva questions
- How assessment will occur i.e. methods of assessment
- When the assessment will occur
- Duration of assessment
- Where the assessment will take place i.e. context of the assessment (workplace/simulation)
- The criteria for decision making i.e. those aspects that will guide judgments
- Where appropriate, any supplementary criteria are used to make a judgment on the level of performance.

ICES will be monitoring thoroughly the complete Assessment process.

### 2. Testing Environment:

- Training partner shares the batch start date and end date, number of trainees and the job role.
- Assessment will be fixed for a day after the end date of training. It could be next day or later. Assessment will be conducted at the training venue/test center only.
- The knowledge/theory assessments are conducted with proper seating arrangements with enough space between the candidates to prevent mal practicing.
- Question set for Theory and Practical will be distributed to each candidate by the Assessor.
  - Theory testing will include MCQ type questions, pictorial questions etc. which will test the trainee on his theoretical knowledge of the subject.
  - Practical assessments will be conducted in the approved test centers. The training provider will ensure adequate tools and materials are available to conduct the practical test.
  - Viva Testing will be conducted during or post to the practical assessment by the assessor concerned. This Viva Assessment is applicable to understand the outcomes from OJT attended by the candidate concerned.

- One (1) Assessor is eligible to conduct assessments of a batch of maximum 30 candidates.
- The assessment must comprise of two components, namely:
  - Knowledge and Viva assessment (Theory assessment)
  - Skill assessment (Practical / Hands-on Skill assessment)

### 3. Mode of assessment

- Demonstration/Practical Performance /Skill Assessment
- Synoptic multiple-choice question test for Theory Assessment

### 4. Performance/skill assessment:

- The performance/skill assessment will be conducted through demonstration/practical
- For the practical test trainees are assessed through a given task, which they have to complete correctly for them to be marked as passed.
- The assessment is conducted in a simulated working environment. Due to this fact, the assessors must note that the naturally occurring evidence of competence is unavailable or infrequent. Simulation must be undertaken in a Realistic Working Environment which provides an environment that replicates the key characteristics of the workplace in which the skill to be assessed is normally employed.

### 5. Knowledge Assessment:

- The knowledge assessments are conducted through Theory (written) Test and Viva Test
- Synoptic test is used for this. It is an MCQ (Multiple Choice Question) test which is prepared externally and externally marked, meaning by agency having no link with training partners.
- The Viva test will be conducted by the assessor in the oral mode considering the communication and domain understanding of skills of trainees.
- The assessment strategy, weightage and duration of assessment for **Introduction to Roads Repair and Maintenance** is summarized below

Assessment Type	Formative or Summative	Strategies	Weightage	Duration (hours)
Knowledge	Summative	MCQ	45	1 hour
Knowledge	Summative	Viva	10	1 hour
Skill	Summative	Structured practical Task	45	6 hours

### 6. Assessment Quality Assurance levels/Framework

- ICES has developed assessment criteria framework for each Qualification pack as per National Occupational Standards. The criteria framework includes weightages/marks for each criterion under knowledge and skill. The criteria ensure quality assurance as they ensure valid, consistent and fair assessments at all locations. Issued to the affiliated Assessment body. The Assessment Body develops questions based on ICES's approved assessment criteria.
- The training partner will intimate the time of arrival of the assessor and time of leaving the venue. Random spot checks/audit may conducted by ICES to monitor assessment.
- Continuous Monitoring through virtual and In-person mode are conducted to ensure the assessment is conducted as per stipulated process

- Process and Technical audit of assessment batches by quality team are conducted to avoid errors in assessment process
- A well -defined comprehensive framework of NON-COMPLIANCE MATRIX is defined and implemented to identify the non-compliance made by assessor and AA and punitive actions are taken correspondingly.
- The capacity building sessions are conducted regularly for assessors and assessment agencies to update them about best practices in assessment

#### **7. Types of evidence or evidence-gathering protocol:**

- Evidence in the form of answer sheets in case of knowledge assessments (Theory only) is collected.
- For Practical and Viva assessments videos and photographs are prepared as evidence. These are submitted by the assessor to the assessment agency. ICES does random checks of the same with the participant/ trainee's ID and ascertains authenticity and validity of assessments.
- Post Assessment, the evidence are uploaded by Assessor to assessment agency and further assessment agency to ICES as per stipulated TAT
- Evidence are broadly photographic and video graphics in nature (Geo-Tagged)
- Results along with evidence to be submitted to ICES by the concerning Assessment Agency in the prescribed format and on Digital Format and Physical Format (As required)
- Results to be uploaded on SIDH and other relevant portals for collective data management.

#### **8. Method of verification or validation:**

- The process and technical audit of assessment batches are done by Awarding Body
- Attendance of each candidate is verified and it is ensured that only those candidates are assessed by assessors who are meeting the stipulated minimum percentage of attendance
- The result of each candidate is verified; it is verified that that result on SIP is matched with respect to summary sheet submitted by AAs
- Under detailed technical audit for sample batches, the knowledge and skill assessment results for each candidate are checked in technical aspect.
- All the evidence of batches are preserved on server of Awarding Body digital platform

#### **9. On the Job:**

- On job training (OJT), candidates undergo training and leaning 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 ICES. 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 / Engineer / other authorized head of departments of relevant industry under which candidates undergo on job training.
- The Assessment is subject to take place only after submission of OJT data (in case of STT only) approved by concerned industry and training provider.
- The Hard copy of the OJT report (on trainings, outcomes, exposures learnt and feedback certified by Supervisor / Engineer / other authorized head of departments of relevant industry) will be submitted to the Assessor by the concerned candidate on the Assessment date only, failing which the candidate may not be allowed for attending the Assessment.



कौशल विकास और  
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MINISTRY OF  
**SKILL DEVELOPMENT  
AND ENTREPRENEURSHIP**



- As OJT is mandatory for this QP, the TP should ensure the correct submission of all relevant reports pertaining to OJT of each trained candidate. The Assessment agency is responsible for collecting all the relevant information and submit the same to ICES in future (if required).

## References

### Glossary

Term	Description
<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.
<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.



## Acronyms and Abbreviations

Acronym	Description
<b>NOS</b>	National Occupational Standard(s)
<b>NSQF</b>	National Skills Qualification Framework
<b>QP</b>	Qualification 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>ICES</b>	Integrated Council for Entrepreneurship and Skilling (erstwhile Integrated Council for Entrepreneurship and Skilling)
<b>AB</b>	Awarding Body
<b>AA</b>	Assessment Agency
<b>TP</b>	Training Partner
<b>TC</b>	Training Centre
<b>ITI</b>	Industrial Training Institute
<b>ISCO</b>	International Standard Classification of Occupations
<b>NCO</b>	National Classification of Occupations
<b>NCrF</b>	National Credit Framework
<b>NEP</b>	New Education Policy
<b>Q-File</b>	Qualification File
<b>MC</b>	Model Curriculum
<b>PC</b>	Performance Criteria
<b>KU</b>	Knowledge and Understanding
<b>GS</b>	Generic Skills
<b>PMKVY</b>	Pradhan Mantri Kaushal Vikas Yojana
<b>DDUGKY</b>	Deen Dayal Upadhyaya Grameen Kaushalya Yojana
<b>STT</b>	Short Term Training
<b>RPL</b>	Recognition of Prior Learning
<b>NAPS</b>	National Apprenticeship Promotion Scheme
<b>NQR</b>	National Qualification Register
<b>OJT</b>	On the Job Training
<b>NSQC</b>	National Skill Qualification Committee
<b>IS</b>	Indian Standard
<b>MoRTH</b>	Ministry of Road Transport and Highways
<b>IRC</b>	Indian Roads Congress
<b>PMS</b>	Pavement Management System



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<b>BC</b>	Bituminous Concrete
<b>PPE</b>	Personal Protective Equipment
<b>RRM</b>	Road Repair and Maintenance