



IT - ITes SSC
NASSCOM



Model Curriculum

QP Name: INFRASTRUCTURE ENGINEER

QP Code: SSC/Q0801

QP Version: 2.0

NSQF Level: 4

Model Curriculum Version: 1.0

IT-ITes Sector Skills Council NASSCOM | Plot No – 7, 8, 9 & 10, Sector 126, Noida, UP.
Pin Code: 201303

Table of Contents

Training Parameters.....	3
Program Overview	4
Training Outcomes.....	4
Compulsory Modules.....	4
Module Details.....	7
Module 1: IT-ITeS/ Infrastructure Management Industry – An Introduction.....	7
Module 2: Deal Remotely with Basic IT Service Requests/ Incidents.....	8
Module 3: Technical Specifications for Handling Service Requests.....	9
Module 4: Monitoring and Validation of Incidents	10
Module 5: Deal Directly with IT Service Requests/Incidents.....	11
Module 6: Concept of Infrastructure Applications	12
Module 7: Carry out Installation/Configuration of Infrastructure Applications.....	13
Module 8: Technical Skills for Installation/Configuration.....	14
Module 9: Manage your Work to meet Requirements	15
Module 10: Work Effectively with Colleagues	16
Module 11: Managing Health and Safety	17
Module 12: Workplace Data Management	18
Module 13: Inclusive and Environmentally Sustainable Workplaces.....	19
Annexure.....	20
Trainer Requirements	20
Assessor Requirements.....	21
Assessment Strategy.....	22
References	24
Glossary.....	24
Acronyms and Abbreviations.....	25

Training Parameters

Sector	IT-ITeS
Sub-Sector	IT Services
Occupation	Infrastructure Management Services (IMS)
Country	India
NSQF Level	4
Aligned to NCO/ISCO/ISIC Code	NCO-2015/ 2511.0103
Minimum Educational Qualification and Experience	Graduate with 1 year of relevant experience OR 12th Class with 4 years of relevant experience OR ITI with 4 years of relevant experience
Pre-Requisite License or Training	Certifications/courses in Infrastructure standards, ITIL, etc. Relevant certifications in one or more of the following areas: Storage, Server, Database, etc.
Minimum Job Entry Age	18 Years
Last Reviewed On	13-09-2021
Next Review Date	13-09-2024
NSQC Approval Date	27-01-2022
QP Version	2.0
Model Curriculum Creation Date	13-09-2021
Model Curriculum Valid Up to Date	13-09-2024
Model Curriculum Version	1.0
Minimum Duration of the Course	400 hours
Maximum Duration of the Course	400 hours

Program Overview

This section summarizes 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.

- Categorize service requests/incidents accurately using the incident management tool.
- Examine the process of managing service requests related to hardware devices and PC lifecycle management.
- Categorize and prioritize service requests from customers with justifiable resolution time.
- Monitor systems promptly for automated alerts and analyse the same for identifying the nature of incident.
- Utilize standard procedures/ guidelines/ checklists /tools and methods for carrying out installation/configuration of applications.
- Examine service requests for installation/ configuration outside the level of competence for referral.
- Explain the purpose and use of customer relationship management (CRM) database.
- Demonstrate effective communication and collaboration with colleagues.
- Apply measures to maintain standards of health and safety at the workplace.
- Use different approaches to effectively manage and share data and information.
- Develop strong relationships at the workplace through effective communication and conflict management.
- Identify best practices to maintain an inclusive, environmentally sustainable workplace.

Compulsory Modules

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

NOS and Module Details	Theory Duration (In Hours)	Practical Duration (In Hours)	On-the-Job Training Duration (Mandatory)	On-the-Job Training Duration (Recommended)	Total Duration (In Hours)
Module 1 (Bridge Module): IT-ITeS/Infrastructure Management services industry – An Introduction	02:00	02:00	00:00	00:00	04:00
SSC/N0101 Deal remotely with basic IT service requests/incidents NOS Version No. 2 NSQF Level 5	19:00	47:00	00:00	00:00	66:00
Module 2: Deal remotely with basic IT service requests/incidents	10:00	26:00	00:00	00:00	36:00



Module 3: Technical specifications for handling service requests	09:00	21:00	00:00	00:00	30:00
SSC/N0202 Deal directly with IT service requests/incidents NOS Version No. 2 NSQF Level 5	18:00	47:00	00:00	00:00	65:00
Module 4: Monitoring and validation of incidents	08:00	12:00	00:00	00:00	20:00
Module 5: Deal directly with IT service requests /incidents	10:00	35:00	00:00	00:00	45:00
SSC/N0305 Carry out installation/configuration of infrastructure applications NOS Version No. 2 NSQF Level 5	30:00	70:00	00:00	00:00	100:00
Module 6: Concept of infrastructure applications	10	20	00:00	00:00	30
Module 7: Carry out installation/configuration of infrastructure applications	10	30	00:00	00:00	40
Module 8: Technical Skills for installation/ configuration	10	20	00:00	00:00	30
SSC/N9001 Manage your work to meet requirements NOS Version No. 2 NSQF Level 4	08:00	32:00	00:00	00:00	40:00
Module 9: Manage your work to meet requirements	08:00	32:00	00:00	00:00	40:00
SSC/N9002 Work effectively with colleagues NOS Version No. 2 NSQF Level 4	08:00	32:00	00:00	00:00	40:00
Module 10: Work effectively with colleagues	08:00	32:00	00:00	00:00	40:00
SSC/N9003 Maintain a healthy, safe and secure working environment NOS Version No. 2 NSQF Level 4	05:00	25:00	00:00	00:00	30:00
Module 11: Managing Health and Safety	05:00	25:00	00:00	00:00	30:00
SSC/N9004 Provide data/information in standard formats NOS Version No. 2 NSQF Level 4	05:00	25:00	00:00	00:00	30:00
Module 12: Workplace Data Management	05:00	25:00	00:00	00:00	30:00



SSC/N9014 Implement & Improve the Gender Sensitivity, PWD (Person/People with Disability) Sensitivity and Greening NOS Version No. 1 NSQF Level 4	05:00	20:00	00:00	00:00	25:00
Module 13: Inclusive and Environmentally Sustainable Workplaces	05:00	20:00	00:00	00:00	25:00
Total Duration	100:00	300:00	00:00	00:00	400:00

Module Details

Module 1: IT-ITeS/ Infrastructure Management Industry – An Introduction

Bridge Module

Terminal Outcomes:

- Identify the career path for an infrastructure engineer.

Duration: 02:00(In Hours)	Duration: 02:00(In Hours)
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> Discuss the relevance of the IT-ITeS sector. Identify the career path for an Infrastructure Engineer. 	<ul style="list-style-type: none"> Collate information, evidence, and articles regarding the IT- ITeS/infrastructure management domain through internet surfing. Categorize key applications to use infrastructure management services.
Classroom Aids:	
Whiteboard and Markers Chart paper and sketch pens LCD Projector and Laptop for presentations	
Tools, Equipment and Other Requirements:	
Labs equipped with the following: PCs/Laptops Internet with Wi-Fi (Min 2 Mbps Dedicated)	



Module 2: Deal Remotely with Basic IT Service Requests/ Incidents

Mapped to SSC/N0101, v2.0

Terminal Outcomes:

- Examine remote customer support process to test potential solutions.
- Categorize service requests/incidents accurately using the incident management tool.

Duration: 10:00(In Hours)	Duration: 26:00(In Hours)
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Identify the policies, procedures, and processes for dealing with basic IT service requests or incidents. • Identify methods to understand the nature of the problem and perform initial diagnosis. 	<ul style="list-style-type: none"> • Design methods to estimate resolution time, where an immediate solution cannot be found. • Plan how to track problems to keep customers informed about progress and any delays in resolving problems. • Examine methods to resolve common issues, including account maintenance/access problems networking/connectivity problems, hardware problems, operating system problems, etc.
Classroom Aids:	
Whiteboard and Markers Chart paper and sketch pens LCD Projector and Laptop for presentations	
Tools, Equipment and Other Requirements:	
Labs equipped with the following: PCs/Laptops Internet with Wi-Fi (Min 2 Mbps Dedicated) Microphone / voice system for lecture and class activities Computer Lab with 1:1 PC: trainee ratio and having internet connection, MS Office / Open office, Browser, Templates and filled sample documents for project charter, requirements specifications Server connected in a network	

Module 3: Technical Specifications for Handling Service Requests

Mapped to SSC/N0101, v2.0

Terminal Outcomes:

- Identify tools and processes for incident management and customer support.
- Manage service requests related to hardware devices and PC lifecycle.

Duration: 09:00(In Hours)	Duration: 21:00(In Hours)
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Identify latest changes, procedures, and practices in the field of expertise. • List the specific tools and processes for validating service requests. 	<ul style="list-style-type: none"> • Examine the process of managing service requests related to laptops, desktops, routers, switches, LAN cables, RAM, mother board, server, RAID, blade server, storage media, printers, other peripherals, and drivers, etc. • Analyse the technical process of operating systems (e.g., Windows, UNIX, and Macintosh), networks (e.g., LAN, WAN, VPN, IP, wireless, network devices), etc. • Practice the use of PC lifecycle management tools (e.g., SMS, SCOM, Marimba, Altris), productivity tools (e.g., MS Office), etc.
Classroom Aids:	
Whiteboard and Markers Chart paper and sketch pens LCD Projector and Laptop for presentations	
Tools, Equipment and Other Requirements:	
Labs equipped with the following: PCs/Laptops Internet with Wi-Fi (Min 2 Mbps Dedicated) Microphone / voice system for lecture and class activities Computer Lab with 1:1 PC: trainee ratio and having internet connection, MS Office / Open office, Browser, Templates and filled sample documents for project charter, requirements specifications Server connected in a network	



Module 4: Monitoring and Validation of Incidents

Mapped to SSC/N0202, v2.0

Terminal Outcomes:

- Categorize and prioritize service requests from customers with justifiable resolution time.
- Monitor automated alerts and check their authenticity.

Duration: 08:00(In Hours)	Duration: 12:00(In Hours)
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Discuss how to acknowledge service requests/incidents using tools and procedures. • Identify solutions/workarounds for service requests/incidents from the reference books. 	<ul style="list-style-type: none"> • Demonstrate skills to monitor systems to identify customer service requests. • Examine how to track automated alerts to ensure they are genuine incidents and report for alerts that are false. • Examine the use of rule-based transactions in line with customer-specific guidelines, procedures, rules, and service level agreements.
Classroom Aids:	
Whiteboard and Markers Chart paper and sketch pens LCD Projector and Laptop for presentations	
Tools, Equipment and Other Requirements:	
Labs equipped with the following: PCs/Laptops Internet with Wi-Fi (Min 2 Mbps Dedicated) Microphone / voice system for lecture and class activities Computer Lab with 1:1 PC: trainee ratio and having internet connection, MS Office / Open office, Browser, Templates and filled sample documents for project charter, requirements specifications Server connected in a network	

Module 5: Deal Directly with IT Service Requests/Incidents

Mapped to SSC/N0202, v2.0

Terminal Outcomes:

- Refer service requests/incidents outside the level of competence and authority with relevant stakeholders.
- Analyse automated alerts to accurately identify the nature of incidents and design a suitable solution for the same as per the SLA.

Duration: 10:00(In Hours)	Duration: 35:00(In Hours)
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • List the standard guidelines scripts to resolve service requests/incidents within the level of competence and authority. • Identify the latest changes, procedures, and practices in the field of expertise. 	<ul style="list-style-type: none"> • Examine the method of applying source coding standards, ticketing tools and utilities/tools for handling service requests. • Examine the use of alternate solutions/ workarounds, where available. • Demonstrate proper use of information technology effectively to input and/or extract data accurately. • Execute policies and compliance requirements that apply to IT service requests and incidents. • Plan strategies to build a documented resolution of service requests/incidents accurately.
Classroom Aids:	
Whiteboard and Markers Chart paper and sketch pens LCD Projector and Laptop for presentations	
Tools, Equipment and Other Requirements:	
Labs equipped with the following: PCs/Laptops Internet with Wi-Fi (Min 2 Mbps Dedicated) Microphone / voice system for lecture and class activities Computer Lab with 1:1 PC: trainee ratio and having internet connection, MS Office / Open office, Browser, Templates and filled sample documents for project charter, requirements specifications Server connected in a network	



Module 6: Concept of Infrastructure Applications

Mapped to SSC/N0305, v2.0

Terminal Outcomes:

- Identify procedures/guidelines/ checklists for installation/configuration of basic applications.
- Utilize standard procedures/ guidelines/ checklists to install/configure applications.

Duration: 10:00(In Hours)	Duration: 20:00(In Hours)
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Identify service requests for installation/ configuration of basic applications using tools and procedures. 	<ul style="list-style-type: none"> • Design methods to extract sufficient information from customers to accurately identify the nature of service requests. • Use range of methods and techniques, including types of questioning, used when dealing with customers.
Classroom Aids:	
Whiteboard and Markers Chart paper and sketch pens LCD Projector and Laptop for presentations	
Tools, Equipment and Other Requirements:	
Labs equipped with the following: PCs/Laptops Internet with Wi-Fi (Min 2 Mbps Dedicated) Microphone / voice system for lecture and class activities Computer Lab with 1:1 PC: trainee ratio and having internet connection, MS Office / Open office, Browser, Templates and filled sample documents for project charter, requirements specifications Server connected in a network	

Module 7: Carry out Installation/Configuration of Infrastructure Applications

Mapped to SSC/N0305, v2.0

Terminal Outcomes:

- Identify the tools used for carrying out installation/configuration of applications.
- Examine service requests for installation/ configuration outside the level of competence for referral.

Duration: 10:00(In Hours)	Duration: 30:00(In Hours)
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Discuss different types of service requests that may occur like technical, non-technical, financial, etc. 	<ul style="list-style-type: none"> • Determine the hierarchy for referral process of service requests for installation/ configuration. • Design strategies with superiors/trainers, where necessary to implement service requests. • Evaluate the process to install/configure range of applications. • Examine the use of recording the completion of service requests accurately.
Classroom Aids:	
Whiteboard and Markers Chart paper and sketch pens LCD Projector and Laptop for presentations	
Tools, Equipment and Other Requirements:	
Labs equipped with the following: PCs/Laptops Internet with Wi-Fi (Min 2 Mbps Dedicated) Microphone / voice system for lecture and class activities Computer Lab with 1:1 PC: trainee ratio and having internet connection, MS Office / Open office, Browser, Templates and filled sample documents for project charter, requirements specifications Server connected in a network	

Module 8: Technical Skills for Installation/Configuration

Mapped to SSC/N0305, v2.0

Terminal Outcomes:

- Use information technology effectively to input and/or extract data accurately.
- Explain the purpose and use of database management tools.

Duration: 10:00(In Hours)	Duration: 20:00(In Hours)
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Define CRM and it's use as an application tool. • Identify the latest updates with changes in procedures and practices for maximum output. 	<ul style="list-style-type: none"> • Examine the method of attending issues, including hardware devices (e.g., laptops, desktops, mobiles), operating systems (e.g., Windows, UNIX, Macintosh), etc. • Evaluate the incident management process for servers (e.g., Windows Server and Active Directory, VMware, Citrix). • Demonstrate application of CRM and Zoho.
Classroom Aids:	
Whiteboard and Markers Chart paper and sketch pens LCD Projector and Laptop for presentations	
Tools, Equipment and Other Requirements:	
Labs equipped with the following: PCs/Laptops Internet with Wi-Fi (Min 2 Mbps Dedicated) Microphone / voice system for lecture and class activities Computer Lab with 1:1 PC: trainee ratio and having internet connection, MS Office / Open office, Browser, Templates and filled sample documents for project charter, requirements specifications Server connected in a network	



Module 9: Manage your Work to meet Requirements

Mapped to SSC/N9001, v2.0

Terminal Outcomes:

- Define the scope of work.
- Demonstrate effective work planning principles.
- Recognize the importance of using time and resources effectively.

Duration: 08:00(In Hours)	Duration: 32:00(In Hours)
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Discuss the role, responsibilities, and limits of the responsibilities. • Discuss the importance of gathering detailed work requirements and prioritizing work areas. • Identify commonly made mistakes in the prioritized work areas. • Explain the importance of completing work accurately. 	<ul style="list-style-type: none"> • Analyse needs, requirements, and dependencies in order to meet the work requirements. • Apply resource management principles and techniques. • Demonstrate the ways to maintain an organized work area. • Apply effective time management principles.
Classroom Aids:	
Whiteboard and Markers Chart paper and sketch pens LCD Projector and Laptop for presentations	
Tools and Other Requirements:	
Labs equipped with the following: PCs/Laptops Internet with Wi-Fi (Min 2 Mbps Dedicated) Microphone / voice system for lecture and class activities Computer Lab with 1:1 PC: trainee ratio and having internet connection, MS Office / Open office, Browser, Outlook / Any other Email Client, and chat tools	



Module 10: Work Effectively with Colleagues

Mapped to SSC/N9002, v2.0

Terminal Outcomes:

- Explain the methods and mechanisms for effective communication.
- Explain the importance of effective collaboration at workplace.

Duration: 08:00(In Hours)	Duration: 32:00(In Hours)
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Explain the principles of clear communication. • Outline the importance of being a good listener and adhering to the commitments. • Identify challenges and pain points related to work distribution while working in a team. • Explain the importance of distributing and sharing workloads. 	<ul style="list-style-type: none"> • Use oral, written, and non-verbal communication skills in a variety of forms to construct thoughts and ideas effectively. • Demonstrate professional behaviour at workplace. • Demonstrate effective team mentorship.
Classroom Aids:	
Whiteboard and Markers Chart paper and sketch pens LCD Projector and Laptop for presentations	
Tools and Other Requirements:	
Labs equipped with the following: PCs/Laptops Internet with Wi-Fi (Min 2 Mbps Dedicated) Microphone / voice system for lecture and class activities Computer Lab with 1:1 PC: trainee ratio and having internet connection, MS Office / Open office, Browser, Outlook / Any other Email Client, and chat tools Social networking tool / LMS tool to enable blog posts or discussion board, Instant messenger, chat, and email tools to enable mock exercises.	



Module 11: Managing Health and Safety

Mapped to SSC/N9003, v2.0

Terminal Outcomes:

- Describe how to maintain a health, safe and secure environment at workplace.

Duration: 05:00(In Hours)	Duration: 25:00(In Hours)
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> Discuss the importance of complying with organizational health, safety and security policies and procedures. Discuss possible roles and responsibilities that an employee can take up with respect to workplace safety management. Evaluate sample organizational emergency procedures. Identify mechanisms to improve workplace health, safety, and security. Label appropriate personal protective equipment needed for a job role. 	<ul style="list-style-type: none"> Demonstrate the identification of possible breaches in health, safety, and security policies. Document health, safety, and security breaches. Design a contingency plan for emergency situations like fire, short circuit, accidents, earthquake, etc. Demonstrate the use of First Aid, CPR, and safety evacuation process as part of routine operations.
Classroom Aids:	
Whiteboard and Markers Chart paper and sketch pens LCD Projector and Laptop for presentations	
Tools and Other Requirements:	
Labs equipped with the following: PCs/Laptops Internet with Wi-Fi (Min 2 Mbps Dedicated) Microphone / voice system for lecture and class activities Computer Lab with 1:1 PC: trainee ratio and having internet connection, MS Office / Open office, Browser, Outlook / Any other Email Client, and chat tools A sample health and safety policy document, Emergency broadcast system and mock emergency signage in the appropriate areas of the training institute	



Module 12: Workplace Data Management

Mapped to SSC/N9004, v2.0

Terminal Outcomes:

- Describe how data / information can be managed effectively.

Duration: 05:00(In Hours)	Duration: 25:00(In Hours)
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> Discuss data privacy in terms of sharing and retrieving data from different sources. Discuss the significance of providing accurate and up-to-date information on time. Identify the database management tools and importance of CRM database. 	<ul style="list-style-type: none"> Apply the concepts behind information and knowledge management. Perform rule-based analysis of data/information. Format the data/information into required types/forms. Demonstrate effective data management. Use CRM databases to record and extract information.
Classroom Aids:	
Whiteboard and Markers Chart paper and sketch pens LCD Projector and Laptop for presentations	
Tools and Other Requirements:	
Labs equipped with the following: PCs/Laptops Internet with Wi-Fi (Min 2 Mbps Dedicated) Microphone / voice system for lecture and class activities Computer Lab with 1:1 PC: trainee ratio and having internet connection, MS Office / Open office, Browser, Outlook / Any other Email Client, and chat tools Social networking tool / LMS tool to enable blog posts or discussion board, Instant messenger, chat and email tools to enable mock exercises.	

Module 13: Inclusive and Environmentally Sustainable Workplaces

Mapped to SSC/N9014, v1.0

Terminal Outcomes:

- Illustrate sustainable practices at workplace for energy efficiency and waste management.
- Apply different approaches to maintain gender equality and increase inclusiveness for PwD.

Duration: 05:00(In Hours)	Duration: 20:00(In Hours)
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Describe different approaches for efficient energy resource utilisation and waste management. • Describe the importance of following the diversity policies. • Identify stereotypes and prejudices associated with people with disabilities and the negative consequences of prejudice and stereotypes. • Discuss the importance of promoting, sharing, and implementing gender equality and PwD sensitivity guidelines at organization level. 	<ul style="list-style-type: none"> • Practice the segregation of recyclable, non-recyclable and hazardous waste generated. • Demonstrate different methods of energy resource use optimization and conservation. • Demonstrate essential communication methods in line with gender inclusiveness and PwD sensitivity.
Classroom Aids:	
Whiteboard and Markers Chart paper and sketch pens LCD Projector and Laptop for presentations	
Tools and Other Requirements:	
Labs equipped with the following: PCs/Laptops Internet with Wi-Fi (Min 2 Mbps Dedicated) Microphone / voice system for lecture and class activities	

Annexure

Trainer Requirements

Trainer Prerequisites						
Minimum Educational Qualification	Specialization	Relevant Industry Experience		Training Experience		Remarks
		Years	Specialization	Years	Specialization	
3 years technical Diploma or any UG Degree	CITS + 3 years domain experience.	Minimum 2 years' experience in IT services domain		1 year preferred	Minimum 2 years' experience in infrastructure services industry.	Additional certification in infrastructure standards, ITIL (or similar) and relevant certifications in one or more of the following areas: Storage, Server, and Database.

Trainer Certification	
Domain Certification	Platform Certification
Minimum accepted score in SSC Assessment is 80% per NOS being taught in "SSC/Q0801, V 2.0"	Recommended that the trainer is certified for the Job role "Trainer" mapped to the Qualification Pack "MEP/Q2601". Minimum accepted score is 80% aggregate



Assessor Requirements

Assessor Prerequisites						
Minimum Educational Qualification	Specialization	Relevant Industry Experience		Training/Assessment Experience		Remarks
		Years	Specialization	Years	Specialization	
Graduate in any discipline		2	Experience that involves client interaction	1-2	Experience that involves client interaction	

Assessor Certification	
Domain Certification	Platform Certification
Not Applicable	

Assessment Strategy

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

Assessment System Overview

A uniform assessment of job candidates as per industry standards facilitates progress of the industry by filtering employable individuals while simultaneously providing candidates with an analysis of personal strengths and weaknesses.

Assessment Criteria

Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down the proportion of marks for Theory and Skills Practical for each PC.

The assessment for the theory part will be based on a knowledge bank of questions created by the SSC. Assessment will be conducted for all compulsory NOS, and where applicable, on the selected elective/option NOS/set of NOS.

Guidelines for Assessment			
Testing Environment	Tasks and Functions	Productivity	Teamwork
<ul style="list-style-type: none"> Carry out assessments under realistic work pressures that are found in the normal industry workplace (or simulated workplace). Ensure that the range of materials, equipment, and tools that learners use are current and of the type routinely found in the normal industry workplace (or simulated workplace) environments. 	<ul style="list-style-type: none"> Assess that all tasks and functions are completed in a way, and to a timescale, that is acceptable in the normal industry workplace. Assign workplace (or simulated workplace) responsibilities that enable learners to meet the requirements of the NOS. 	<ul style="list-style-type: none"> Productivity levels must be checked to ensure that it reflects those that are found in the work situation being replicated. 	<ul style="list-style-type: none"> Provide situations that allow learners to interact with the range of personnel and contractors found in the normal industry workplace (or simulated workplace).

Assessment Quality Assurance framework

NASSCOM provides two assessment frameworks NAC and NAC-Tech.

NAC (NASSCOM Assessment of Competence)

NAC follows a test matrix to assess Speaking & Listening, Analytical, Quantitative, Writing, and Keyboard skills of candidates appearing for assessment.

NAC-Tech

NAC-Tech test matrix includes assessment of Communication, Reading, Analytical, Logical Reasoning, Work Management, Computer Fundamentals, Operating Systems, RDBMS, SDLC, Algorithms & Programming Fundamentals, and System Architecture skills.

Methods of Validation

To pass a QP, a trainee should score an average of 70% across generic NOS' and a minimum of 70% for each technical NOS. In case of unsuccessful completion, the trainee may seek reassessment on the Qualification Pack.

Method of assessment documentation and access

The assessment agency will upload the result of assessment in the portal. The data will not be accessible for change by the assessment agency after the upload. The assessment data will be validated by SSC assessment team. After upload, only SSC can access this data.

References

Glossary

Term	Description
Key Learning Outcome	Key learning outcome is the statement of what the 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 outcomes is specified in terms of knowledge, understanding (theory) and skills (practical application).
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	Training 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.
National Occupational Standards	National Occupational Standard specify the standard of performance an individual must achieve when carrying out a function in the workplace.
Persons with Disability	Persons with Disability are those who have long-term physical, mental, intellectual, or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on equal basis with others.
Integrated Development Environment	An integrated development environment is a software application that provides comprehensive facilities to computer programmers for software development.

Acronyms and Abbreviations

Term	Description
QP	Qualification Pack
NSQF	National Skill Qualification Framework
NSQC	National Skill Qualification Committee
NOS	National Occupational Standards
SSC	Skill Sectors Council
NASSCOM	National Association of Software & Service Companies
PWD	Persons with Disability
IDE	Integrated Development Environment