



**Skill India**  
कौशल भारत - कुशल भारत



सत्यमेव जयते  
GOVERNMENT OF INDIA  
MINISTRY OF SKILL DEVELOPMENT  
& ENTREPRENEURSHIP



N S D C  
National  
Skill Development  
Corporation

Transforming the skill landscape



IT - ITeS SSC  
**NASSCOM**

# Facilitator Guide



Sector  
IT-ITeS

Sub-Sector  
Engineering and R&D

Occupation  
Technical Support

Reference ID: SSC/Q5101, Version 3.0  
NSQF level 4

## Technical Support Engineer

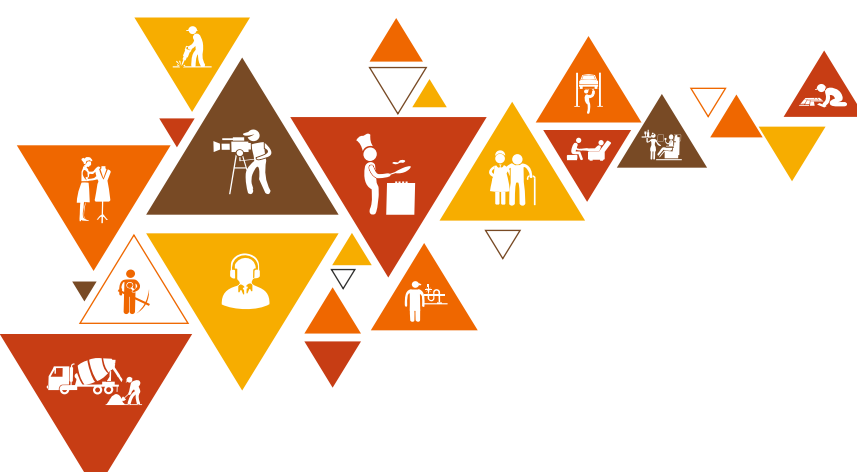


Scan this QR Code to access eBook

Website: [www.sscnasscom.in](http://www.sscnasscom.in)

First Edition, January 2019

E-mail: [ssc@nasscom.in](mailto:ssc@nasscom.in)

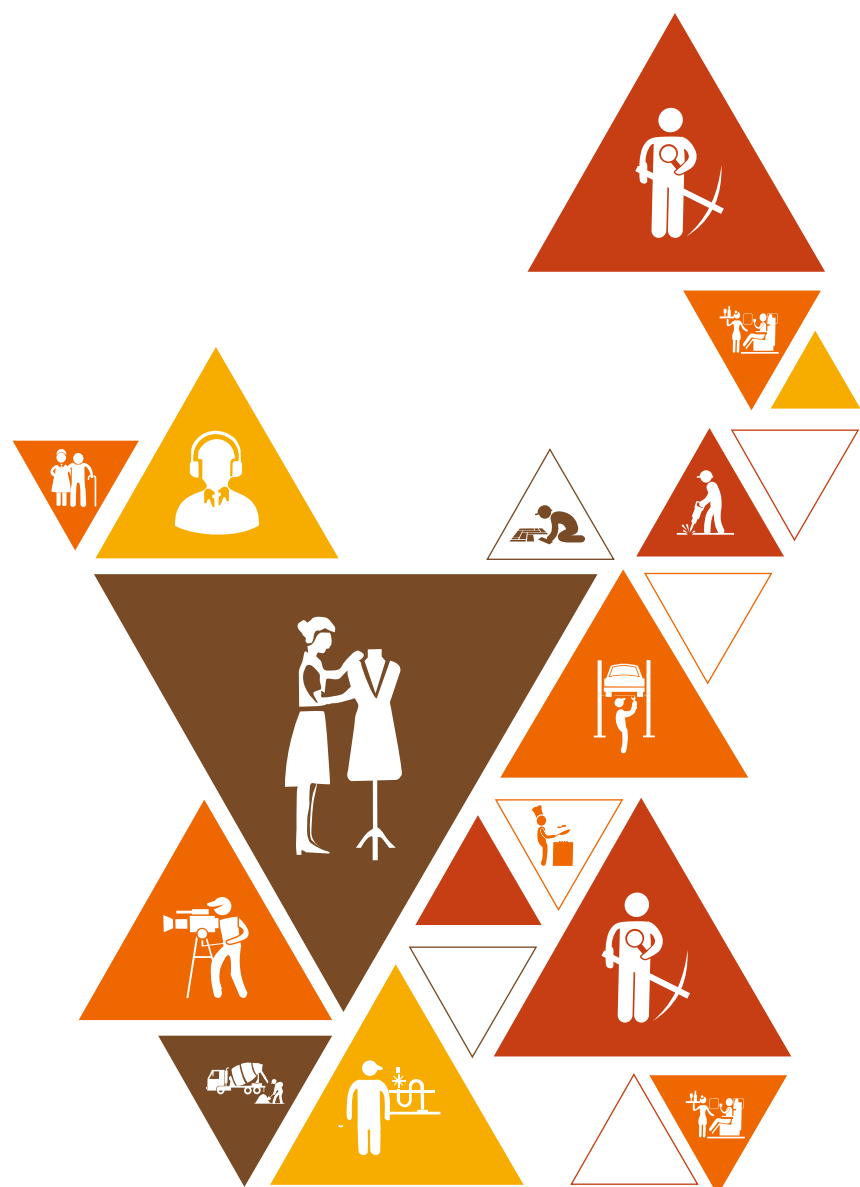




**Shri Narendra Modi**

Prime Minister of India

“ Skilling is building a better India.  
If we have to move India towards  
development then Skill Development  
should be our mission. ”



## Acknowledgements

IT-ITeS Sector Skills Council NASSCOM would like to express its gratitude to all the individuals and institutions who contributed in different ways towards the preparation of this “Participant Handbook”. Without their contribution it would not have been completed. Special thanks are extended to those who collaborated in the preparation of its different modules. Sincere appreciation is also extended to all who provided peer review for these modules. The preparation of this Handbook would not have been possible without the IT - ITeS support. Industry feedback has been extremely encouraging from inception to conclusion and it is with their input that we have tried to bridge the skill gaps existing today in the Industry.

This handbook is dedicated to the aspiring youth who desire to achieve special skills which will be a lifelong asset for their future endeavours.

## About this Book

The Facilitator Guide is designed for the Trainers to enable training for a specific job role and enhance the quality of executing the training program. This particular Facilitator Guide is designed for enabling the training program for the job role of “Technical Support Engineer” in the IT-ITeS Sector.

This course is aligned to Qualification Pack, Technical Support Engineer, Reference ID: SSC/Q5101.

This Qualification pack is developed by IT-ITeS Sector Skills Council NASSCOM. This course encompasses all 7 National Occupational Standards (NOS).

Each unit starts with learning objectives, followed by relevant activities and corresponding training methodology. Upon successful completion of this course, the participant will be able to:

1. SSC/N3003: Deal remotely with customer queries
2. SSC/N0501: Co-ordinate/ resolve software products/ applications issues
3. SSC/N9014: Maintain an inclusive, environmentally sustainable workplace
4. DGT/VSQ/N0102 Employability Skills

Besides, it has been endeavored to follow the facilitator guide guidelines prescribed by the National Skill Development Corporation.

## Symbols Used



Key Learning Outcomes



Elaborate



Exercise



Activity



Facilitation Notes



Unit Objectives



Demonstrate



Do



Explain



Say



Ask



Team Activity



Summary



Resources

# Table of Contents

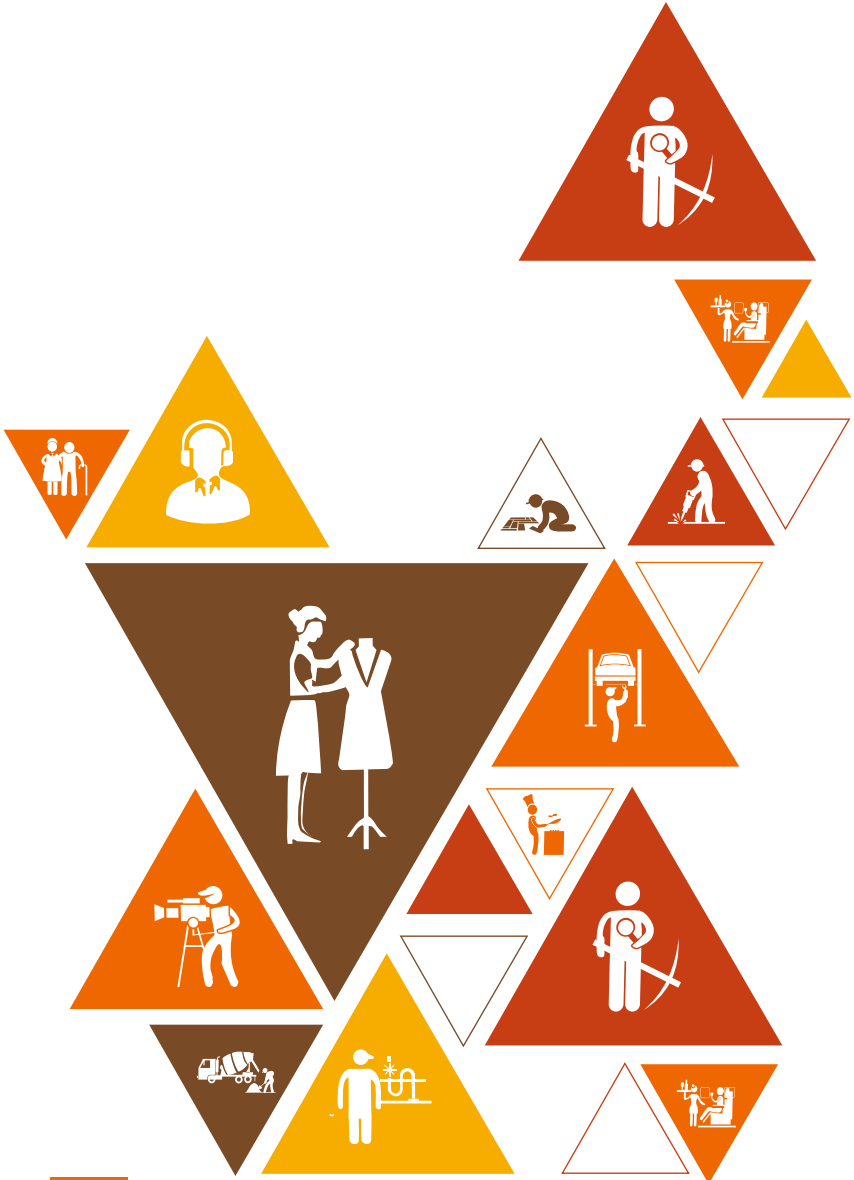
Sl.No	Modules and Units	Page No
1.	<b>IT-ITeS/E&amp;RD Industry – An Introduction (Bridge Module)</b>	<b>1</b>
	Unit 1.1 - IT-ITeS/E&RD Industry	3
2.	<b>IT and Software Knowledge (Bridge Module)</b>	<b>7</b>
	Unit 2.1 - IT Components and Data Analysis	9
3.	<b>Gain Knowledge of CRM Tools (SSC/N3003)</b>	<b>12</b>
	Unit 3.1 - Management Tools used in Technical Processes	14
	Unit 3.2 - Customer Relationship Management (CRM) and CRM Tools	16
4.	<b>Receive and Handle Queries from Customers (SSC/N3003)</b>	<b>20</b>
	Unit 4.1 - Managing Customer Queries	22
5.	<b>Knowledge of Products and Applications (SSC/N5101)</b>	<b>26</b>
	Unit 5.1 - Software Products and Applications	28
6.	<b>Resolve Application Issues (SSC/N5101)</b>	<b>31</b>
	Unit 6.1 - Project Variance and its Control Measures	33
	Unit 6.2 - Software Anomalies and Variables	35
	Unit 6.3 - Networks, Operating Systems, and Databases	37
7.	<b>Maintain Liaison with Stakeholders (SSC/N5101)</b>	<b>40</b>
	Unit 7.1 - Checkpoints for Software Product Deployment	42
	Unit 7.2 - Stakeholder Management	44
	Unit 7.3 - Organization Knowledge Base	46
8.	<b>Inclusive and Environmentally Sustainable Workplaces (SSC/N9014)</b>	<b>48</b>
	Unit 8.1 - Sustainable Practices	50
	Unit 8.2 - Respect Diversity and Strengthen Practices to Promote Equality	54



## Table of Contents

Sl.No	Modules and Units	Page No
9.	Employability Skills (DGT/VSQ/N0102)	59
10.	Annexure	62
	Annexure I : Annexure QR Codes	63
	Annexure II : Training Delivery Plan	65
	Annexure III : Assessment Criteria	67



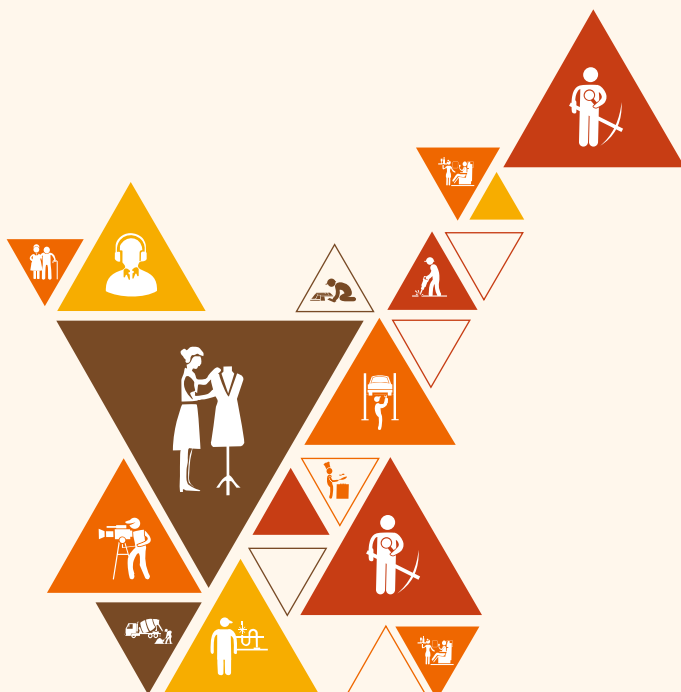




**IT - ITeS SSC**  
**NASSCOM**

# 1. IT-ITeS/E&RD Industry – An Introduction

## Unit 1.1 - IT-ITeS/E&RD Industry



## Bridge Module

## Key Learning Outcomes

**At the end of this module, the participant will be able to:**

1. Discuss various delivery models used in the IT-ITeS industry
2. Evaluate the key emerging trends in the IT-E&RD industry

## UNIT 1.1: IT- ITeS / E&RD Industry

### Unit Objectives

**At the end of this unit, the participant will be able to:**

1. Elaborate the relevance of the IT-ITeS sector
2. Identify the career path for a Technical Support Engineer
3. List the various sub-sectors of the IT-E&RD industry

### Resources to be Used

- Participant Handbook
- Paper, Pens, Notepad, Chart paper
- Computer, Projector
- Whiteboard, Marker, and Duster

### Say

- Start the class by saying, "This training program is developed to impart specific knowledge and skills relevant to the job required to be performed as a "Technical Support Engineer", in the "IT-ITeS Sector/Industry."
- Talk about the Qualification Pack (QP), and National Occupational Standards (NOS).
- List the compulsory NOSs to the QP "Technical Support Engineer".
- Say, "Before we start the program let's play a small game".

### Group Activity

<b>Objective</b>	The purpose of this activity is to gain participants' attention
<b>Materials required</b>	N/A

### Steps/procedure

### Steps

1. This is an ice-breaker activity.
2. Ask the participants to gather in a circle.
3. Inform them that they all will play together to create a story.
4. One of the participants will start the game by narrating the first three lines of an imaginary story.
5. The next adjacent participant will say 'suddenly.'
6. Then, the participant next to him continues the story by stating the new three lines.
7. Whoever does not respond will be considered out of the game.
8. After this, the Facilitation will sum up the whole story quickly.

### Conclusion / what has been achieved

This activity will assist participants to pay attention in the class and also help them to connect.

## Explain



- Explain IT- ITeS / E&RD Industry.
- Explain the Delivery models of IT sector.
- Explain the Relevance of IT- ITeS / E&RD Industry.

## Demonstrate



- Demonstrate 'Engineering services, research and development sector' with the help of AV link- <https://youtu.be/LD4IR3nKcRI>

## Elaborate



- Elaborate the following topics:
  - Career path for Technical Support Engineer with the help of Fig. 1.1.8 in the Participant Handbook.
  - Skills required for Technical Support Engineer
  - Sub-sectors of IT- ITeS / E&RD Industry
  - IT-enabled services
  - Emerging trends in IT industry

**Ask**

- What do you understand by IT/ITeS sector?
- Can name few IT service providers in India?
- How on-shore delivery model is different from off-shore delivery model in IT sector?
- What is MNC?

**Notes for Facilitation**

- Allow one or two students to answer the questions.
- Write down the correct answer on the board.

**Summarize**

- Summarize the session.
- Prepare a list of participant's doubts if they have any. Encourage them to ask questions.
- Answer their queries.

**Notes for Facilitation**

- Examine participants about their expectations from this program.
- Inquire participants if they have any doubts. Then, encourage them to ask questions.
- Answer their queries.

## Exercise

- Instruct the trainees to open their Participant Handbook and complete the exercise given in Module 1.
- Ensure that the participants have opened the correct page for the activity.
- Give them 20 minutes to complete the exercise.
- Exercise Hints:
  - Answers to Questions I.
    1. Hint - Refer to section 1.1.2
    2. Hint - Refer to section 1.1.4
  - Answers to Questions II.
    1. GIC – IT enabled service
    2. Cloud Computing - Emerging technology trend
    3. FDI – Government initiative
    4. Off-shore- Delivery Model
    5. Medical Transcription
  - Answers to Questions III.
    1. IT services
    2. Off-shore

## QR Code

Scan the QR Code to watch the related video



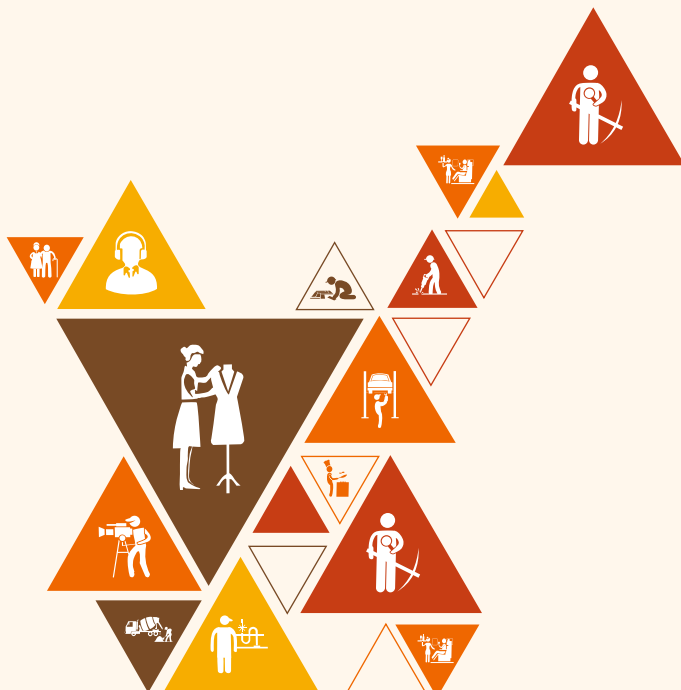
[youtu.be/LD4lR3nKcRI](https://youtu.be/LD4lR3nKcRI)  
Engineering services, research  
and development sector



**IT - ITeS SSC**  
**NASSCOM**

## 2. IT and Software Knowledge

## Unit 2.1 - IT Components and Data Analysis



## Bridge Module



## Key Learning Outcomes

**At the end of this module, the Participant will be able to:**

1. Analyze information to meet business requirements, through the use of various IT components
2. Demonstrate application of various IT components including browsers, social media and operating systems

## Unit 2.1: IT Components and Data Analysis

### Unit Objectives

**At the end of this unit, Participant will be able to:**

1. Identify information technology tools to input and/or extract data accurately
2. Discuss the importance of providing rationale for inferences, during data analysis

### Resources to be Used

- Participant Handbook
- Paper, Pens, Notepad, Chart paper
- Computer, Projector
- Whiteboard, Marker, and Duster

### Ask

- Start the class by asking a few questions on ITeS sector/Sub-sectors and give participants the chance to guess before revealing the correct answer.
- Ask them to name a few emerging trends of IT sector.
- Do you have an idea about what is Information system and IT tool to extract accurate data?

### Notes for Facilitation

- Allow one or two students to answer the questions.
- Write down the correct answer on the board.

### Say

- Start the class by saying, "This unit will help you to identify information technology tools to input and/or extract data accurately."
- "Further, we will discuss the significance of providing rational inferences during data analysis".

## Explain



- Explain information system and its components (Fig.2.1.1)
- Explain various components of Information Technology.
- Explain the classification of computer software with the help of Fig. 2.1.6 given in the Participant Handbook.
- Explain the difference between Application and System Software.

## Elaborate



- Elaborate on the following topics:
  - Common Software present in Computers
  - Application of browsers, social media and operating systems
  - Database and its types
  - Network and its types

## Ask



- What are the key features of LAN?
- What is computer network?
- Can you tell me any two types of databases?
- Name any two types of common software.
- List the examples of social media platforms.
- What is Shareware software?
- How application is different from system software?

## Notes for Facilitation



- Allow one or two students to answer the questions.
- Write down the correct answer on the board.

## Explain



- Explain various processes in information systems.
- Explain different phases of BPM with the help of Fig. 2.1.16 given in the Participant Handbook.
- Explain data analysis and its various techniques.
- Explain the steps to obtain unbiased inferences.

## Summarize



- Summarize the session.
- Prepare a list of participant's doubts if they have any. Encourage them to ask questions.
- Answer their queries.

## Exercise



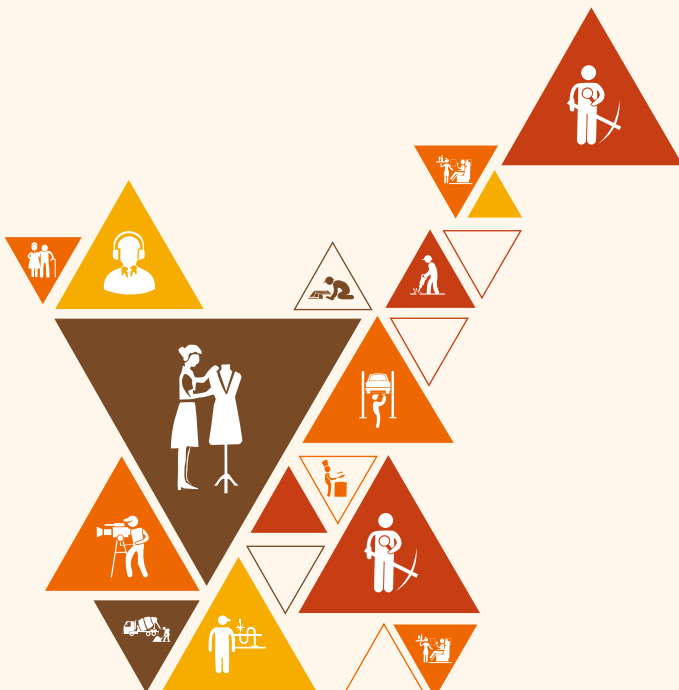
- Instruct the trainees to open their Participant Handbook and complete the exercise given in Module 2.
- Ensure that the participants have opened the correct page for the activity.
- Give them 20 minutes to complete the exercise.
- Exercise Hints:
  - Answers to Questions I.
    1. Hint - Refer to section 2.1.1.1
    2. Hint - Refer to section 2.1.2
  - Answers to Questions II.
    1. Google Chrome – Web browser
    2. Instagram – Social Media Platform
    3. Mouse - Input Device
    4. Printer - Output device
    5. Linux OS - Operating system Software
  - Answers to Questions III.
    1. Motherboard
    2. Firmware



**IT - ITeS SSC**  
**NASSCOM**

### 3. Gain Knowledge of CRM Tools

## Unit 3.2 - Customer Relationship Management (CRM) and CRM Tools



SSC/N3003

## Key Learning Outcomes

**At the end of this module, the participant will be able to:**

1. Identify the functions of various management tools including CRM
2. Demonstrate the use of CRM tool to record, categorize and retrieve customer information for technical support

## Unit 3.1: Management Tools used in Technical Processes

### Unit Objectives

At the end of this unit, the participant will be able to:

1. Discuss the purpose and features of various tools used in technical processes

### Resources to be Used

- Participant Handbook
- Paper, Pens, Notepad, Chart paper
- Computer, Projector
- Whiteboard, Marker, and Duster

### Say

- “In the last unit, we gained an understanding related to components of information technology and data analysis’s significance”.
- “In today’s session, we will discuss about management tools used in technical processes.”

### Explain

- Explain management tools and its importance.
- Explain various types of management tools.
- Explain the meaning of strategic planning and its various components.
- Explain the components of balanced scorecard.

### Do/Demonstrate

- Demonstrate 'Management Tools used in Technical Processes' with the help of the AV link - [youtu.be/5xWJGO2rKHY](https://youtu.be/5xWJGO2rKHY)

## Elaborate



- Elaborate on the following topics:
  - Customer Relationship Management (CRM)
  - Benchmarking
  - Employee engagement

## Ask



- What do you understand by strategic planning?
- Why management tools are important in IT sector?
- Can you differentiate between benchmarking and employee engagement?

## Notes for Facilitation



- Allow one or two students to answer the questions.
- Write down the correct answer on the board.

## Summarize



- Summarize the session by explaining purpose and features of various tools used in technical processes.
- Prepare a list of participant's doubts if they have any. Encourage them to ask questions.
- Answer their queries.



## Unit 3.2: Customer Relationship Management (CRM) and CRM Tools

### Unit Objectives

**At the end of this unit, participant will be able to:**

1. Identify management tools and systems for recording, categorizing and resolving customer queries
2. Discuss the process of categorizing various customer queries using CRM tool

### Resources to be Used

- Participant Handbook
- Paper, Pens, Notepad, Chart paper
- Computer, Projector
- Whiteboard, Marker, and Duster

### Say

- “In the last unit, we have discussed purpose and features of various management tools used in technical processes”.
- “Now, we will try to understand Customer Relationship Management (CRM) and CRM Tools”.
- “Every organization has a customer support team who help customers with the company’s products and services. The support team is responsible to resolve customer issues in a timely and efficient manner. The various aspects of handling customers like collecting data, registering queries, resolving issues, etc. can be carried out using various management tools and techniques”.

### Explain

- Explain how to create customer database.
- Explain the steps to manage customer queries with the help of Fig. 3.2.2 given in the Participant Handbook.
- Explain the purpose if tools to handle customer queries.
- Explain various tools required to handle customer queries.
- Explain various channels for users to contact company with the help of Fig. 3.2.5 given in the Participant Handbook.

## Elaborate



- Elaborate on the following topics:
  - Ticketing system
  - Customer portals
  - Time tracker (Fig.3.2.7)
  - Task escalation (Fig.3.2.10)
  - Customer feedback (Fig.3.2.9)
  - Internal communication software
  - Project management tool
  - Social listening and monitoring tool

## Ask



- What do you understand by customer database?
- Can you name any two channels to handle customer queries?
- What is time tracker?

## Notes for Facilitation



- Allow one or two students to answer the questions.
- Write down the correct answer on the board.

## Explain



- Explain what is CRM is.
- Explain the benefits of Customer Relationship Management.
- Explain the types of CRM.
- Explain CRM Network.
- Explain the Categorization of Customer Queries

## Do/Demonstrate



- Demonstrate 'Customer Relationship Management (CRM) and CRM Tools' with the help of the AV link - [youtu.be/ExDV-KT6CBs](https://youtu.be/ExDV-KT6CBs)

## Summarize



- Summarize the session.
- Prepare a list of participant's doubts if they have any. Then, encourage them to ask questions.
- Answer their queries.

## Exercise



- Instruct the trainees to open their Participant Handbook and complete the exercise given in Module 3.
- Ensure that the participants have opened the correct page for the activity.
- Give them 20 minutes to complete the exercise.
- Exercise Hints:
  - Answers to Questions I.
    1. Hint - Refer to section 3.1.2
    2. Hint - Refer to section 3.2.2
  - Answers to Questions II.
    1. Live chat - Channel for users to contact company
    2. Ticketing system - Tool to handle customer queries
    3. Balanced scorecard - Management tool
    4. Knowledge base – Way to collect customer data
    5. Transactional data - Customer Portal
  - Answers to Questions III.
    1. Balanced scorecard
    2. Operational

## QR Code

Scan the QR Code to watch the related video



[youtu.be/5xWJGO2rKHY](https://youtu.be/5xWJGO2rKHY)

Unit 3.1 Management Tools used in  
Technical Processes



[youtu.be/ExDV-KT6CBs](https://youtu.be/ExDV-KT6CBs)

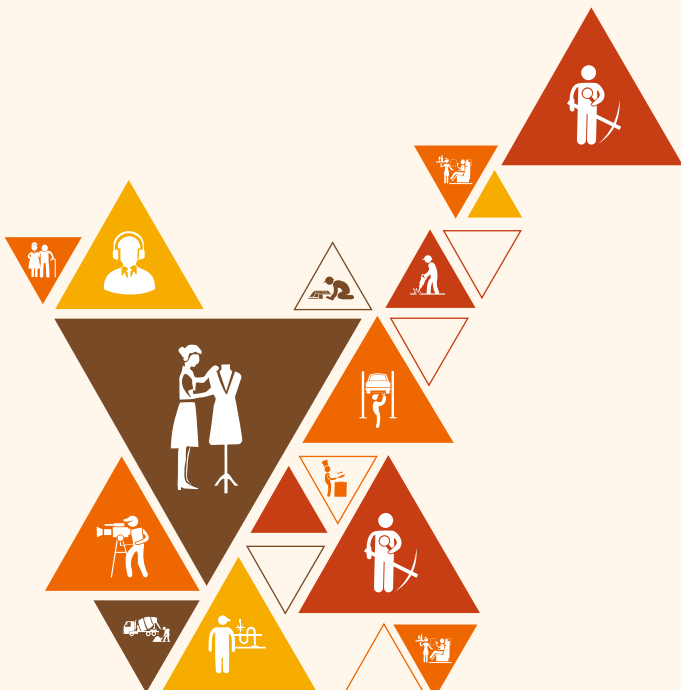
Unit 3.2 Customer Relationship  
Management (CRM) and CRM Tools



**IT - ITeS SSC**  
**NASSCOM**

## 4. Receive and Handle Queries from Customers

## Unit 4.1 - Managing Customer Queries



SSC/N3003

## Key Learning Outcomes

**At the end of this unit, participant will be able to:**

1. Identify management tools and systems for recording, categorizing and resolving customer queries
2. Discuss the process of categorizing various customer queries using CRM tool

## Unit 4.1: Managing Customers Queries

### Unit Objectives

**At the end of this unit, participant will be able to:**

1. Discuss the importance of documenting, classifying and prioritizing customer queries
2. Identify the common types of customer queries and how to resolve them
3. Discuss various issues that may affect customer satisfaction
4. Identify different styles, approaches and questioning techniques for understanding customer queries

### Resources to be Used

- Participant Handbook
- Paper, Pens, Notepad, Chart paper
- Computer, Projector
- Whiteboard, Marker, and Duster

### Notes for Facilitation

- Welcome and greet the students.
- Begin the session with a brief recapitulation of the previous session.

### Say

- “In the previous session, we have gained knowledge related to various management tools such as CRM Tools.”
- “Can somebody list a few of them?”
- “In today’s session, we will discuss how to manage customer’s queries in specific”

## Explain



- Explain importance of documenting, classifying and prioritizing customer queries.
- Explain documentation with the help of Fig. 4.2 given in the Participating Handbook.
- Explain the advantages of classifying customer queries.
- Explain types of queries based on prioritization.
- Explain SLA and its key aspects.

## Elaborate



- Elaborate on the following topics:
  - Types of Technical queries (Fig. 4.1.9)
  - Types of General Issues (Fig. 4.1.10)
  - Measures to Improve Customer Satisfaction (Fig. 4.1.11)
  - Benefits of Customer Satisfaction (Fig. 4.1.12)
  - Steps to Handle and Resolve Customer Complaints (Fig. 4.1.14)

## Explain



- Explain ways to greet customers.
- Explain various ways to resolve customer queries.
- Explain how to deal with unhappy and dissatisfied customers.
- Explain the steps to close a customer query call.

## Ask



- How will you resolve customer complaints?
- Why do you documenting, classifying and prioritizing customer queries is important?
- What are the effective ways to Improve customer satisfaction?



## Group Activity

<b>Objective</b>	The purpose of this activity is to help the trainees how to deal with customer queries
<b>Materials required</b>	Paper, Pen
<b>Steps/procedure</b>	<ul style="list-style-type: none"> <li>• Divide the participants into groups of 2.</li> <li>• Ask one person to take the role of customer, and the other takes the technical support engineer part.</li> <li>• Ask each group to prepare a mock script/ questionnaire related to customer queries with the help of steps mentioned in Participant Handbook.</li> <li>• The participant with the role of technical support engineer will greet the other participant (customer) and start conversing and guide them to their related concern.</li> <li>• Ensure each group carry their conversation in accordance with the mock script, where participant with role of technical support engineer attempt to answer the counterparts' questions and close the query.</li> <li>• Ask them to write their observation.</li> <li>• Give them 10 minutes to complete the activity.</li> <li>• Discuss the results with class.</li> <li>• Repeat the activity with all the groups.</li> </ul>
<b>Conclusion / what has been achieved</b>	<ul style="list-style-type: none"> <li>• This activity will highlight how to communicate and resolve customer queries.</li> </ul>

## Explain

- Explain the process of call tracking.
- Explain steps to follow during on-site visit to resolve issues.
- Explain steps to escalate a problem.
- Explain troubleshooting computer related problems and application errors.

## Summarize

- Summarize the session.
- Prepare a list of participant's doubts if they have any. Encourage them to ask questions.
- Answer their queries.

## Exercise

- Instruct the trainees to open their Participant Handbook and complete the exercise given in Module 4.
- Ensure that the participants have opened the correct page for the activity.
- Give them 20 minutes to complete the exercise.
- Exercise Hints:
  - Answers to Questions I.
    1. Hint - Refer to section 4.1.1
    2. Hint - Refer to section 4.1.4
  - Answers to Questions II.
    1. SLA - Used in prioritization of queries
    2. Hardware issues - Technical query
    3. Wrong product offer - General query
    4. Satisfied customer - Help in getting new customers
    5. Positive and helpful attitude - Soft skill in Technical Support Engineer
  - Answers to Questions III.
    1. Accountability
    2. Cost



**Skill India**  
कौशल भारत - कुशल भारत



सत्यमेव जयते  
GOVERNMENT OF INDIA  
MINISTRY OF SKILL DEVELOPMENT  
& ENTREPRENEURSHIP



N.S.D.C.  
National  
Skill Development  
Corporation

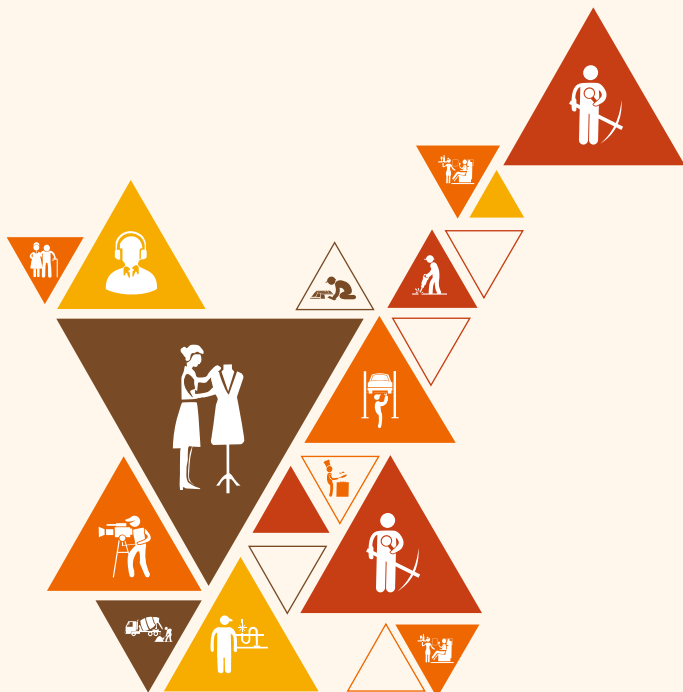
Transforming the skill landscape



**IT - ITeS SSC**  
**NASSCOM**

## 5. Knowledge of Products and Applications

Unit 5.1 - Software Products and Applications



**SSC/N5101**

## Key Learning Outcomes

**At the end of this module, the participant will be able to:**

1. Identify various policies and procedures related to software products and applications
2. Demonstrate project approval strategies and recommend changes

## Unit 5.1: Software Products and Applications

### Unit Objectives

**At the end of this unit, participant will be able to:**

1. Discuss the policies of an organization in deploying software products
2. Identify various project requirements, resources and technicalities
3. Explain the importance of non-disclosure agreement with stakeholders
4. Identify company hierarchy for project approval process

### Resources to be Used

- Participant Handbook
- Paper, Pens, Notepad, Chart paper
- Computer, Projector
- Whiteboard, Marker, and Duster

### Say

- “In the last module, we discussed various ways to manage customer queries and identified different styles, approaches and questioning techniques for understanding customer queries.”
- “Today, we are going to cover organizational policies for deploying software products”.
- “Also, we will learn about various project requirements, resources, non-disclosure agreement and company hierarchy for project approval process in software products and applications”.

### Ask

- Do you have any idea what is a software product?
- Can you tell me what are its uses?

**Do**

- Hold a brainstorming session with the trainees on the classification and characteristics of good software products with the help of Fig. 5.1.1 and 5.1.2 given in the Participant Handbook.
- Write down the answers on the Whiteboard.

**Explain**

- Explain the classification of software in detail.
- Explain organizational policies and standard procedures for software product development.
- Explain necessary requirements, resources and technicalities for software project.
- Explain software development cycle and its different stages.
- Explain the steps for software release.
- Explain software deployment and its process with help of Fig. 5.1.11 given in the Participant Handbook.

**Do/Demonstrate**

- Demonstrate Software Products and Applications with the help of the AV link - [youtu.be/WnENje0MBkQ](https://youtu.be/WnENje0MBkQ)

**Elaborate**

- Elaborate the following topics:
  - Non-disclosure Agreement with Stakeholders
  - Project Approval Process

**Ask**

- What is non-disclosure agreement?
- What is software deployment?
- What is the significance of SDLC?

## Summarize

- Summarize the session.
- Prepare a list of participant's doubts if they have any. Encourage them to ask questions.
- Answer their queries.

## Exercise

- Instruct the trainees to open their Participant Handbook and complete the exercise given in Module 5.
- Ensure that the participants have opened the correct page for the activity.
- Give them 20 minutes to complete the exercise.
- Exercise Hints:
  - Answers to Questions I.
    1. Hint - Refer to section 5.1.1
    2. Hint - Refer to section 5.1.4
  - Answers to Questions II.
    1. COTS – Software Product
    2. Adobe flash – Software Application
    3. Coding – Part of SDLC
    4. Vendor and suppliers - Stakeholders
    5. Term of agreement- Part of NDA
  - Answers to Questions III.
    1. Marketing team
    2. Version tracking

## QR Code

Scan the QR Code to watch the related video



[youtu.be/WnENje0MBkQ](https://youtu.be/WnENje0MBkQ)

Unit 5.1 Software Products and Applications



**Skill India**  
कौशल भारत - कुशल भारत



सत्यमेव जयते  
GOVERNMENT OF INDIA  
MINISTRY OF SKILL DEVELOPMENT  
& ENTREPRENEURSHIP



N · S · D · C  
National  
Skill Development  
Corporation

Transforming the skill landscape



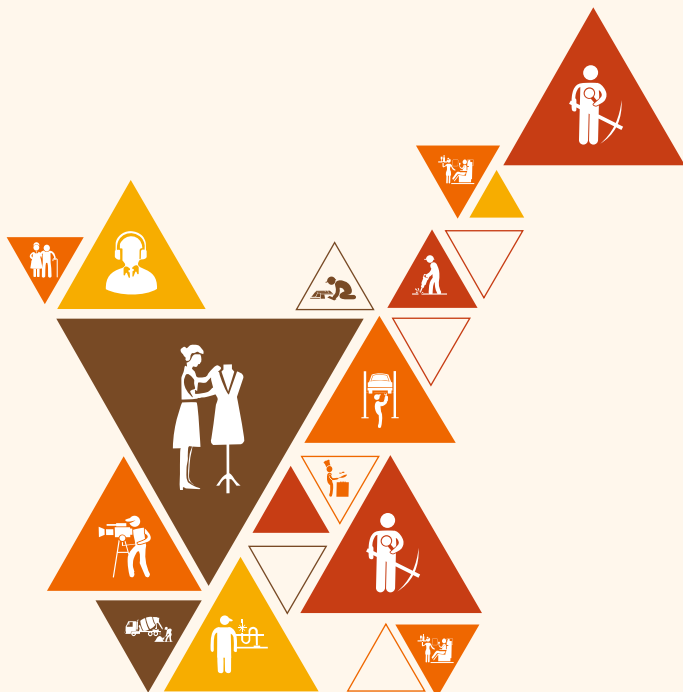
**IT - ITeS SSC**  
**NASSCOM**

## 6. Resolve Application Issues

Unit 6.1 - Project Variance and its Control Measures

Unit 6.2 - Software Anomalies and Variables

Unit 6.3 - Networks, Operating Systems, and Databases



**SSC/N5101**



## Key Learning Outcomes

**At the end of this module, the participant will be able to:**

1. Identify project related issues and their solutions
2. Demonstrate the use of software variables in creation of various products

## UNIT 6.1: Project Variance and its Control Measures

### Unit Objectives

**At the end of this unit, the participant will be able to:**

1. Discuss the importance of identifying variances and how to correct/escalate variances

### Resources to be Used

- Participant Handbooks
- Paper, Pens, Notepad, Chart paper
- Computer, Projector
- Whiteboard, Marker, and Duster

### Do

- Welcome and greet the students.
- Discuss the important topics from the previous two modules.

### Say

- Say that, "So, let's start today's session. In this module, we are going to discuss various project variances and its control measures".
- "Do you know importance of identifying variances and how to correct/escalate variances?"
- "Let's find it in detail."

### Explain

- Explain the factors that help to determine the baseline of the project.
- Explain the causes for variance in projects.
- Explain the positive and negative variance.
- Explain the benefits of variance analysis.

## Ask

- How accurate was the final message in the end?
- Did you confirm before whispering and check the accuracy of the message?
- How easy is it to misinterpret or change the meaning of a piece of information?

## Summarize

- Summarize the session.
- Prepare a list of participant's doubts if they have any. Encourage them to ask questions.
- Answer their queries.

## Unit 6.2: Software Anomalies and Variables

### Unit Objectives

**At the end of this unit, the participant will be able to:**

1. Identify the standard tools and templates available for tracking software anomalies

### Resources to be Used

- Participant Handbooks
- Paper, Pens, Notepad, Chart paper
- Computer, Projector
- Whiteboard, Marker, and Duster

### Notes for Facilitation

- Welcome and greet the students.
- Begin the session with a brief recapitulation of the previous session.

### Explain

- Explain the software anomalies and tools to track anomalies with help of Table 6.2.1.
- Explain defect severity and defect priority.
- Explain the importance of standard tools and template to track software anomaly.
- Explain the benefit of tracking system.

### Do/Demonstrate

- Demonstrate Software Anomalies and Variables with the help of the AV link - [youtu.be/jNo9i-6zuqM](https://youtu.be/jNo9i-6zuqM)

## Elaborate



- Elaborate the following topics:
  - Defect reporting (Table 6.2.2)
  - Software variables (Fig. 6.2.4)

## Ask



- Can you name few popular bug tracking software?
- What is defect severity?
- What do you understand by software variables?

## Summarize



- Summarize the session with the roleplay activity.
- Prepare a list of participants' doubts if they have any. Encourage them to ask questions.
- Answer their queries.

## Unit 6.3: Networks, Operating Systems, and Databases

### Unit Objectives

**At the end of this unit, the participant will be able to:**

1. Identify the features of LAN, WAN, CITRIX, UNIX, IP Network, Windows Server, Active Directory etc

### Resources to be Used

- Participant Handbooks
- Paper, Pens, Notepad, Chart paper
- Computer, Projector
- Whiteboard, Marker, and Duster

### Notes for Facilitation

- Begin the session with a brief recapitulation of the previous session.

### Say

- “A computer network connects several independent computers to share data (Information) and resources.”
- “This allows the users to communicate easily. The network connection can be made with the help of cables or wireless media. A network is identified by the network addresses and host names.”
- “Today, we will discuss various features of network operating systems and databases”.

### Explain

- Explain key features of good network with the help of Fig. 6.3.1 given in the participant handbook.
- Explain local area network and its components.
- Explain wide area network and its components.
- Explain the importance of internet protocol.
- Explain various operating systems and databases.

## Ask

- What are the key components of UNIX?
- What is CITRIX?
- What is defect severity?
- What do you understand by software variables?

## Summarize

- Summarize the session.
- Prepare a list of participant's doubts if they have any. Encourage them to ask questions.
- Answer their queries.

## Exercise

- Instruct the trainees to open their Participant Handbook and complete the exercise given in Module 6.
- Ensure that the participants have opened the correct page for the activity.
- Give them 20 minutes to complete the exercise.
- Exercise Hints:
  - Answers to Questions I.
    1. Hint - Refer to section 6.1.1
    2. Hint - Refer to section 6.3.1
  - Answers to Questions II.
    1. Lighthouse – Bug tracking software
    2. Null – Software variable
    3. WAN – Type of computer network
    4. UNIX – Operating System
    5. Active directory – Database
  - Answers to Questions III.
    1. char
    2. Customer premises equipment

## QR Code

Scan the QR Code to watch the related video



[youtu.be/jNo9i-6zuqM](https://youtu.be/jNo9i-6zuqM)

Unit 6.2 Software Anomalies and Variables

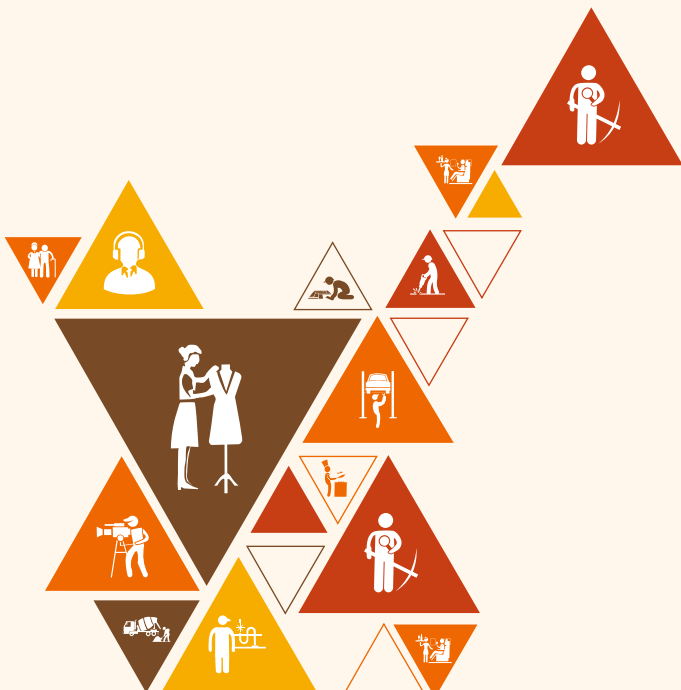




**IT - ITeS SSC**  
**NASSCOM**

## 7. Maintain Liaison with Stakeholders

## Unit 7.3 - Organization Knowledge Base



SSC/N5101

## Key Learning Outcomes

**At the end of this module, the participant will be able to:**

1. Discuss the current practices in stakeholder management
2. Demonstrate error monitoring and project report generation to adhere timelines

## Unit 7.1: Checkpoints for Software Product Deployment

### Unit Objectives

**At the end of this unit, the participant will be able to:**

1. Identify various checkpoints of a project/product deployment

### Resources to be Used

- Participant Handbooks
- Paper, Pens, Notepad, Chart paper
- Computer, Projector
- Whiteboard, Marker, and Duster

### Notes for Facilitation

- Begin the session with a brief recapitulation of the previous session.

### Say

- “DevOps is a set of best practices for software development aiming at shortening delivery times for new software updates and at the same time maintaining quality.”
- “It uses automation for software deployment and includes a Continuous Integration (CI) framework, where the new code is integrated into a shared repository by teams working on a regular basis.”
- “This helps to detect and remove bugs early and ensures that the new release contains code with very few or zero errors.”
- “So, Let’s discuss different types of deployment strategies used in DevOps methodology.”

### Explain

- Explain various software deployment methodologies and strategies.
- Explain the significance of deployment checklist with the help of Fig 7.1.2 given in the Participant Handbook.
- Explain error monitoring.
- Explain the project status report and its content.

## Ask

- What are uses of project status report?
- What includes in the status summary in project status report?
- What is back-end monitoring?
- Can anyone list any two key points of after deployment checklist?

## Summarize

- Summarize the session with an emphasis on various checkpoints of a project/product deployment.
- Prepare list of participant's doubts if they have any. Encourage them to ask questions.
- Answer their queries.

## Unit 7.2: Stakeholder Management

### Unit Objectives

**At the end of this unit, the participant will be able to:**

1. Discuss methods to update stakeholders (internal and external), and third parties about project progress

### Resources to be Used

- Participant Handbooks
- Paper, Pens, Notepad, Chart paper
- Computer, Projector
- Whiteboard, Marker, and Duster

### Notes for Facilitation

- Begin the session with a brief recapitulation of the previous session.

### Say

- “In our previous unit, we have learned about various software deployment methodologies. Today, we will discuss different methods to update stakeholders (internal and external), and third parties about project progress.”

### Explain

- Explain the concept of stakeholder management and its principles.
- Explain the benefits of stakeholder management.
- Explain the steps to understand stakeholders.

## Activity

<b>Objective</b>	The purpose of this activity is to learn how to use the stakeholder management template
<b>Materials required</b>	Pen, Paper and Participant Handbook
<b>Steps / procedure</b>	<ul style="list-style-type: none"> <li>• This is an assignment activity.</li> <li>• Ask the participants to open the Participant Handbook and complete the table 7.2.1 given in the Unit 7.2.</li> <li>• Instruct them how to fill the template.</li> <li>• Assist and brainstorm with them to complete the task.</li> <li>• Give 5-10 minutes to complete the activity.</li> </ul>
<b>Conclusion / what has been achieved</b>	This activity will help them to understand the purpose of using stakeholder management template.

## Ask

- What are the uses of stakeholder management?
- List any two principles of stakeholder management.

## Summarize

- Summarize the session by asking questions on the topics covered in the class.
- Prepare a list of participants' doubts if they have any. Encourage them to ask questions.
- Answer their queries.

## Unit 7.3: Organization Knowledge Base

### Unit Objectives

**At the end of this unit, the participant will be able to:**

1. Discuss the procedures to access organization's knowledge base for software data

### Resources to be Used

- Participant Handbooks
- Paper, Pens, Notepad, Chart paper
- Computer, Projector
- Whiteboard, Marker, and Duster

### Notes for Facilitation

- Begin the session with a brief recapitulation of the previous session.

### Explain

- Explain the procedures to access organization's knowledge base for software data.

### Summarize

- Summarize the session.
- Prepare a list of participants' doubts if they have any. Encourage them to ask questions.
- Answer their queries.

## Exercise

- Instruct the trainees to open their Participant Handbook and complete the exercise given in Module 7.
- Ensure that the participants have opened the correct page for the activity.
- Give them 20 minutes to complete the exercise.
- Exercise Hints:
  - Answers to Questions I.
    1. Hint - Refer to section 7.1.2
    2. Hint - Refer to section 7.1.3
  - Answers to Questions II.
    1. GitLab - CI/CD tools
    2. Blue-green - Software deployment strategy
    3. User experience issue - Front-end error
    4. FAQs - Knowledge base
    5. Software problems - Back-end error
  - Answers to Questions III.
    1. Canary
    2. User experience issues



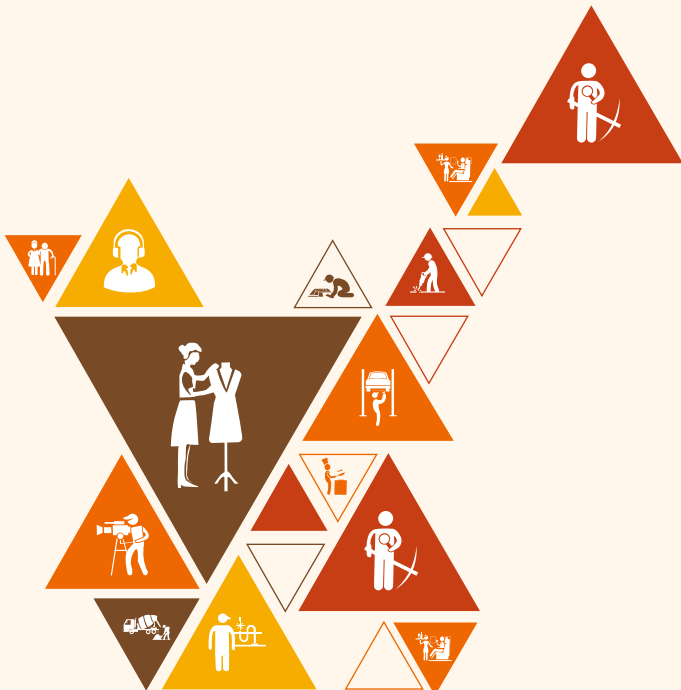


**IT - ITeS SSC**  
**NASSCOM**

## 8. Implement & Improve the Gender Sensitivity, PWD (Person/People with Disability) Sensitivity and Greening

Unit 8.1 - Sustainable Practices

Unit 8.2 - Respect Diversity and Strengthen Practices to  
Promote Equality



**SSC/N9014**

## Key Learning Outcomes

**At the end of this module, the participant will be able to:**

1. Illustrate sustainable practices in the workplace for energy efficiency and waste management
2. Apply different approaches to maintain gender equality and increase inclusiveness for PwD

## Unit 8.1: Sustainable Practices

### Unit Objectives

**At the end of this unit, the participant will be able to:**

1. Describe different approaches for efficient energy resource utilization and waste management
2. Describe the importance of following diversity policies

### Resources to be Used

- Participant Handbooks
- Paper, Pens, Notepad, Chart paper
- Computer, Projector
- Whiteboard, Marker, and Duster

### Notes for Facilitation

- Begin the session with a brief recapitulation of the previous session.

### Say

- “In the previous module, we gain an understanding on workplace data management.”
- “We will now discuss the sustainable practices in workplace that optimize usage of material and energy. Moreover, waste management is a significant aspect of every organization. We will also discuss proper waste management and recycling processes here.”

### Ask

- Why do you think promoting greenery is important?
- How should an organization manage its waste products?

## Notes for Facilitation

- Write down the participants' answers on whiteboard.
- Take appropriate cues from the answers and start teaching the lesson.

## Say

- “Plants in workplaces purify the air; they reduce the concentration of CO<sub>2</sub> (Carbon dioxide gas) and other volatile organic compounds, keeping the air fresh and healthy.”
- “External vegetation moderates heat in and around office block in the summertime, pulling down heat stress and decreasing the necessity for air-conditioning”.
- “Green roofs and facades proliferate insulation or the absorption capacity of heat, plummeting heating and cooling expenses”.
- “Green environments encourage people to undertake activities such as a lunchtime walk, keeping staff alert and healthy. Long periods of sitting adversely affect health.”
- “Renewable Energy is an eternal energy source that does not get depleted on exploitation and fetch nil or minimal waste product”.
- “Let us now participate in an activity to understand the concept better.”

## Activity

<b>Objective</b>	The purpose of this activity is to prepare a sample checklist and monitor energy usage.
<b>Materials required</b>	Pen, Paper
<b>Steps/procedure</b>	<ul style="list-style-type: none"> <li>• This activity is in the form of “Prepare a sample checklist and monitor energy usage”.</li> <li>• This activity targets to make the trainees understand the optimization of energy in the workplace.</li> <li>• The trainer will divide the class into three groups.</li> <li>• The trainer will distinguish one particular room for the case study.</li> <li>• Each group will be assigned with the following tasks.</li> <li>• Count the number of lights, fans and ACs in the case study room.</li> <li>• Note down the duration of their usage.</li> <li>• Assess the proper usage and wastage.</li> <li>• Prepare a checklist to evaluate how to optimize the energy usage.</li> <li>• Submit a document furnishing observations.</li> <li>• The trainer will check the documents and declare the best group.</li> </ul>
<b>Conclusion / what has been achieved</b>	This activity helps the participants to understand the optimization of energy in the workplace.

## Explain



- Explain how to optimize the usage of electricity/energy, materials and water.
- Explain the significance of greening.
- Explain the initiative towards efficient use of natural resources and energy, reduction and prevention of pollution with help of Table 12.1 given in the Participant Handbook.
- Explain various energy options including renewable and non-renewable.

## Do/Demonstrate



- Demonstrate 'Sustainable Practices' with the help of the AV link - [youtu.be/e-m3dFaNc1w](https://youtu.be/e-m3dFaNc1w)

## Elaborate



- Elaborate the following topics:
  - Electricity first aid emergency procedures
  - Steps to free a person from electrocution
  - Segregate Recyclable, Non-Recyclable and Hazardous Waste
  - Process of reporting potential hazard
  - Hazard Identification
  - Hazard and Operability (HAZOP) Study
  - 3Rs of waste optimization

## Activity

<b>Objective</b>	The purpose of this activity is to prepare a sample hazard measurement checklist.
<b>Materials required</b>	Pen, Paper
<b>Steps/procedure</b>	<ul style="list-style-type: none"> <li>• This activity is in the form of “Waste management”.</li> <li>• The trainer will ask every trainee to prepare a sample hazard measurement checklist.</li> <li>• The trainees should assess the waste management system of the building.</li> <li>• They should prepare a document on the existing waste management system and propose systems to enhance it.</li> <li>• They must be able to segregate between different types of waste and their treatment.</li> <li>• On the merit of the document submitted by the trainees, the trainer will announce the best reports.</li> <li>• The trainees who furnished best reports will be appreciated by the class.</li> </ul>
<b>Conclusion / what has been achieved</b>	This activity helps the participants to recognize potential hazards at workplace.

## Summarize

- Summarize the session using roleplay on the techniques of telecalling.
- Prepare a list of participants' doubts if they have any. Encourage them to ask questions.
- Answer their queries.

## Unit 8.2: Respect Diversity and Strengthen Practices to Promote Equality

### Unit Objectives

At the end of this unit, the participant will be able to:

1. Identify stereotypes and prejudices associated with people with disabilities and the negative consequences of prejudice and stereotypes
2. Discuss the importance of promoting, sharing, and implementing gender equality and PwD sensitivity guidelines at the organizational level

### Notes for Facilitation

- Begin the session with a brief recapitulation of the previous session.

### Say

- “In the previous unit, we discussed the sustainable practices in workplace that optimize usage of material and energy. Moreover, waste management is a significant aspect of every organization.”
- “We also discussed proper waste management and recycling processes.”
- “Today we will talk about gender sensitivity at workplace and PwD related policies to strengthen and promote equality.”

### Ask

- Why do you think promoting gender equality at workplace is important?

### Notes for Facilitation

- Write down the participants' answers on whiteboard.
- Take appropriate cues from the answers and start teaching the lesson.

## Say



- “The Constitution of India applies uniformly to equality of opportunity for all citizens (including every legal citizen of India, whether they are the disabled) in matters relating to employment or healthy or disabled.”
- “The Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013 prescribes a system for investigating and redressing complaints against sexual harassment of women at the workplace.”
- “The definition of a ‘disabled person’ is broadened under the 2016 Act: it covers persons with disability, persons with benchmark disability, and persons with disability having high support needs
- The Indian Government respects the equality and therefore no discrimination should be made on the ground of disability.”
- “The definition of a ‘disabled person’ is broadened under the 2016 Act: it covers persons with disability, persons with benchmark disability, and persons with disability having high support needs.”
- “Let us now participate in an activity to understand the concept better.”

## Activity



<b>Objective</b>	The purpose of this activity is to learn the laws and regulations related to PWD issued by the government.
<b>Materials required</b>	N/A
<b>Steps/procedure</b>	<ul style="list-style-type: none"> <li>• This activity is in the form of “elocution session.”</li> <li>• The Trainer will divide the class into 4 groups.</li> <li>• Each group will be assigned with one law related to PWD compliance issued by the government of India (as discussed in the unit).</li> <li>• The groups will come in front of the class one by one and explain the key features and advantages of the law assigned to them.</li> <li>• The Trainer will supervise the session.</li> <li>• The best group will be appreciated by the class.</li> </ul>
<b>Conclusion / what has been achieved</b>	This activity helps the participants to understand the laws and regulations related to PWD compliance issued by the government of India.



## Explain



- Explain the concept of Gender, Gender Equality and Gender discrimination.
- Explain the policies and procedures about gender inclusivity, equality and sustainability while working with colleagues.
- Explain the organization's Redressal Mechanisms.

## Elaborate



- Elaborate the following topic - Comply to PWD Inclusive Policies.

## Activity



<b>Objective</b>	The purpose of this activity is to learn the importance of gender equality at workplace.
<b>Materials required</b>	Pen, Paper
<b>Steps/procedure</b>	<ul style="list-style-type: none"> <li>• This activity is in the form of 'written test'</li> <li>• Each Trainee will be provided with blank sheets and pen</li> <li>• The Trainer will read out the following question to the Trainees</li> <li>• What is gender equality and workplace and how that can be implemented and strengthened?</li> <li>• The Trainees will get 15 minutes to answer the above question</li> <li>• They should write the answer in the stipulated time</li> <li>• The Trainer will check the answers</li> </ul> <p>Trainees with best answers will be appreciated by the class.</p>
<b>Conclusion / what has been achieved</b>	This activity helps the participants to implement gender equality at workplace.

## Summarize



- Summarize the session.
- Prepare a list of participants' doubts if they have any. Encourage them to ask questions.
- Answer their queries.

## Exercise

- Instruct the trainees to open their Participant Handbook and complete the exercise given in Module 8.
- Ensure that the participants have opened the correct page for the activity.
- Give them 20 minutes to complete the exercise.
- Exercise Hints:
  - Answers to Questions I.
    1. The Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act - 2013
    2. The Person with Disabilities Act - 1995
    3. The Mental Health Act - 1987
    4. The Rehabilitation Council of India - 1992
    5. The National Trust Act - 1999
  - Answers to Questions II.
    1. (b)
    2. (c)
    3. (a)
  - Answer to Question III:
    1. Identifying hazards, assessing the risks, controlling and mitigating risks
    2. Wind energy, solar energy, geothermal energy, bio energy, hydropower energy
    3. In order to ensure speedy justice, special courts are instituted in each district to deal with cases pertaining to the violation of the rights of disabled persons. Penalties for the violation of rights of disabled persons can extend to a monetary fine of US\$7,750 (Rs 500,000) and imprisonment for up to five years.
    4. Switch off the main power, don't touch the person who is electrocuted, try to remove the person from the electrical source with the help of non-conducting objects like stick, cardboard, bamboo, etc, lay the person in this position.

## QR Code

Scan the QR Code to watch the related video



[youtu.be/e-m3dFaNc1w](https://youtu.be/e-m3dFaNc1w)

Unit 8.1 Sustainable Practices

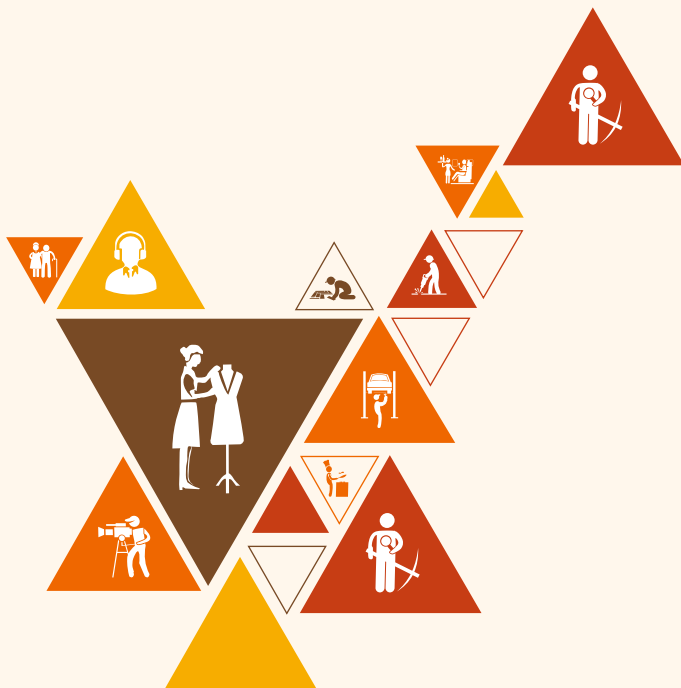


**IT - ITeS SSC**  
**NASSCOM**

## 9. Employability and Entrepreneurship Skills



<https://eskillindia.org/NewEmployability>



Employability skills can be defined as those soft skills which employers look for in a potential employee. These skills equip the employees to carry out their role to the best of their ability and client satisfaction. For example, the ability to explain what you mean in a clear and concise way through written and spoken means helps to build a better relationship with the client or the customer. Similarly, handling stress that comes with deadlines for finishing work and ensuring that you meet the deadlines can be done through effective self-management training. It can also be done by working well with other people from different disciplines, backgrounds, and expertise to accomplish a task or goal. In today's digital age, employers expect that the employees should be able to make use of elementary functions of information and communication technology to retrieve, access, store, and produce, present and exchange information in collaborative networks via the Internet. Students need to develop entrepreneurial skills, so that they can develop necessary knowledge and skills to start their own business, thus becoming job creators rather than job seekers. Potential employees need to develop green skills, which are the technical skills, knowledge, values and attitudes needed in the workforce to develop and support sustainable social, economic and environmental outcomes in business, industry and the community. Thus, students are expected to acquire a range of skills so that you can meet the skill demands of the organisation that you would work for or to set up and run your own business.

This chapter is about employability skills, Constitutional values, becoming a professional in the 21st Century, digital, financial, and legal literacy, diversity and Inclusion, English and communication skills, customer service, entrepreneurship, and apprenticeship, getting ready for jobs and career development.

The scope covers the following:

- Introduction to Employability Skills
- Constitutional values – Citizenship
- Becoming a Professional in the 21st Century
- Basic English Skills
- Career Development & Goal Setting
- Communication Skills
- Diversity & Inclusion
- Financial and Legal Literacy
- Essential Digital Skills
- Entrepreneurship
- Customer Service
- Getting ready for Apprenticeship & Jobs.

Scan the QR codes or click on the link to watch the related videos



[youtu.be/SVPIpwNekWc](https://youtu.be/SVPIpwNekWc)

Work ethics to follow in an organization



[youtu.be/g3dN1wkiOL4](https://youtu.be/g3dN1wkiOL4)

Significance of Healthy Team  
Bonding in Ideal Work Culture



[youtu.be/MMTsl2xT2\\_8](https://youtu.be/MMTsl2xT2_8)

Evacuation procedures for  
workers and visitors



[youtu.be/jtmfiltg8Jw](https://youtu.be/jtmfiltg8Jw)

Health, Safety, and Accident Reporting  
Procedures and the Importance



[youtu.be/pNKOC9mNIOs](https://youtu.be/pNKOC9mNIOs)

Follow the accurate process  
flow to analyze data



**Skill India**  
कौशल भारत - कुशल भारत



सत्यमेव जयते  
GOVERNMENT OF INDIA  
MINISTRY OF SKILL DEVELOPMENT  
& ENTREPRENEURSHIP



N.S.D.C.  
National  
Skill Development  
Corporation

Transforming the skill landscape



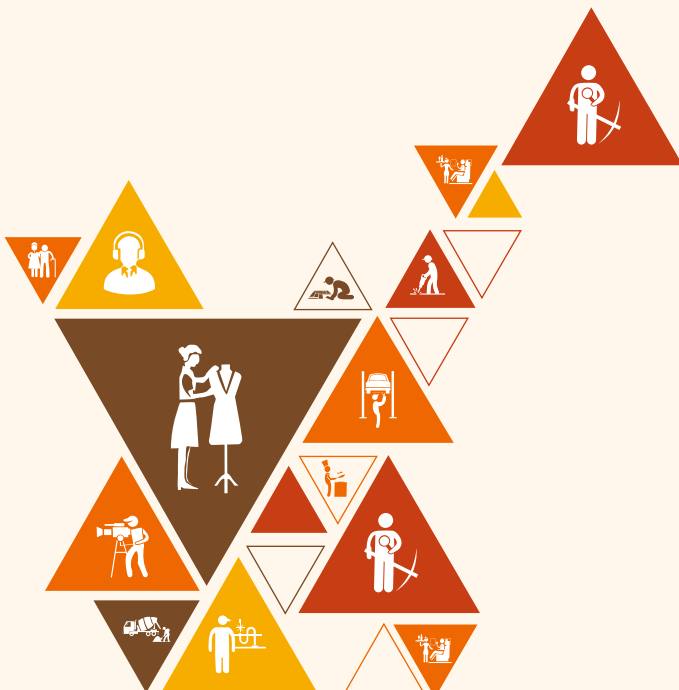
**IT - ITeS SSC**  
**NASSCOM**

## 10. Annexures








Annexure I : Annexure QR Code

Annexure II : Training Delivery Plan

Annexure III: Assessment Criteria







## ANNEXURE - QR Codes

S.no.	Chapter No.	Unit No.	Topic Name	Page No.	QR code(s)	URL
1.	Chapter 1 IT-ITeS/E&RD Industry - An Introduction	Unit 1.1: IT- ITeS / E&RD Industry	IT- ITeS / E&RD Industry	6		<a href="https://youtu.be/LD4lR3nKcRI">youtu.be/LD4lR3nKcRI</a>
2.	Chapter 3 Gain Knowledge of CRM Tools	Unit3.1 Management Tools used in Technical Processes	Management Tools used in Technical Processes	19		<a href="https://youtu.be/5xWJGO2rKHY">youtu.be/5xWJGO2rKHY</a>
3.		Unit 3.2 Customer Relationship Management (CRM) and CRM Tools	Software Development Life Cycle			<a href="https://youtu.be/ExDV-KT6CBs">youtu.be/ExDV-KT6CBs</a>
4.	Chapter 5 Knowledge of products and applications	Unit 5.1 Software Products and Applications	Software Products and Applications	30		<a href="https://youtu.be/WnENje0MBkQ">youtu.be/WnENje0MBkQ</a>
5.	Chapter 6 Resolve Application Issues	Unit 6.2 Software Anomalies and Variables	Software Anomalies and Variables	39		<a href="https://youtu.be/jNo9i-6zuqM">youtu.be/jNo9i-6zuqM</a>
6.	Chapter 8 Workplace Data Management	Unit 8.1 Sustainable Practices	Sustainable Practices	58		<a href="https://youtu.be/e-m3dFaNc1w">youtu.be/e-m3dFaNc1w</a>
7.	Employability Skills (DGT/VSQ/N0102)	Employability and Entrepreneurship Skills	Work Ethics to Follow in an Organization	61		<a href="https://youtu.be/SVPiPwNekWc">youtu.be/SVPiPwNekWc</a>



## ANNEXURE - QR Codes

S.no.	Chapter No.	Unit No.	Topic Name	Page No.	QR code(s)	URL
8.	Employability Skills (DGT/VSQ/N0102)	Employability and Entrepreneurship Skills	Significance of Healthy Team Bonding in Ideal Work Culture	61		youtu.be/g3dN1wkiOL4
9.	Employability Skills (DGT/VSQ/N0102)	Employability and Entrepreneurship Skills	Evacuation procedures for workers and visitors			youtu.be/MTsl2xT2_8
10.	Employability Skills (DGT/VSQ/N0102)	Employability and Entrepreneurship Skills	Health, Safety, and Accident Reporting Procedures and the Importance			youtu.be/p6lP9lPeVhM
11.	Employability Skills (DGT/VSQ/N0102)	Employability and Entrepreneurship Skills	Follow the AccurateProcess Flow to Analyse Data			youtu.be/a8NETGQQhyI

## Annexure II

### Training Development Plan

Training Delivery Plan			
<b>Program Name</b>	<b>Technical Support Engineer</b>		
<b>Qualification Pack, Name and Reference ID</b>	Technical Support Engineer SSC/Q5101, v3.0		
<b>Version No.</b>	3.0	<b>Version Update Date</b>	24/02/2022
<b>Minimum Educational Qualification and Experience</b>	Class 11th OR 10th+1-Yr NTC/NAC/CITS OR NSQF Level 3 STT		
<b>Pre-requisites to Training (If any)</b>	Training programs in customer orientation, technical field, etc.		
<b>Minimum Job Entry Age</b>	16 years		
<b>Training Outcome</b>	<b>After completing this programme, trainee will be able to:</b> <ul style="list-style-type: none"> <li>• Demonstrate application of various IT components including browsers, social media and operating systems</li> <li>• Identify the functions of various management tools including CRM</li> <li>• Demonstrate the use of CRM tool to record, categorize and retrieve customer information for technical support</li> <li>• Identify types of queries and their probable solutions using management tools</li> <li>• Demonstrate proper complaint handling and data management techniques</li> <li>• Identify various policies and procedures related to software products and applications</li> <li>• Demonstrate project approval strategies and recommend changes.</li> <li>• Identify project related issues and their solutions</li> <li>• Demonstrate the use of software variables in creation of various products</li> <li>• Discuss the current practices in stakeholder management</li> <li>• Demonstrate error monitoring and project report generation to adhere timelines</li> <li>• Demonstrate effective work planning principles</li> </ul>		

	<ul style="list-style-type: none"> <li>• Demonstrate effective communication and collaboration with colleagues</li> <li>• Apply measures to maintain standards of health and safety at the workplace</li> <li>• Use different approaches to effectively manage and share data and information.</li> <li>• Develop strong relationships at the workplace through effective communication and conflict management</li> <li>• Identify best practices to maintain an inclusive, environmentally sustainable workplace</li> <li>• Discuss the current practices in enhancing skill and knowledge while at work</li> <li>• Describe how skill/competence enhancement can be achieved at workplace</li> <li>• Illustrate sustainable practices at workplace for energy efficiency and waste management</li> <li>• Apply different approaches to maintain gender equality and increase inclusiveness for PwD</li> </ul>
--	--

Sl. No.	Module Name	Session Name	Session Objectives	NOS Ref.	Methodology	Training Tools/Aids	Duration in Hours
1.	Gain knowledge of CRM tools (SSC/N3003)	Management Tools used in Technical Processes	1. Discuss the purpose and features of various tools used in technical processes	SSC/N 3003	Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 8 P: 0
		Management Tools used in Technical Processes (Contd....)	1. Discuss the purpose and features of various tools used in technical processes		Interactive Lecture in the Class		T: 0 P: 8
		Customer Relationship Management (CRM) and CRM Tools	2. Identify management tools and systems for recording, categorizing and resolving customer queries		Interactive Lecture in the Class		T: 6 P: 2
		Customer Relationship Management (CRM) and CRM Tools (Contd....)	2. Identify management tools and systems for recording, categorizing and resolving customer queries		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 0 P: 6
		Customer Relationship Management (CRM) and CRM Tools	3. Discuss the process of categorizing various customer queries using CRM tool		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 6 P: 2

Sl. No.	Module Name	Session Name	Session Objectives	NOS Ref.	Methodology	Training Tools/Aids	Duration in Hours
		Customer Relationship Management (CRM) and CRM Tools (Contd....)	3. Discuss the process of categorizing various customer queries using CRM tool		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 0 P: 3
2.	Receive and handle queries from customers (SSC/N3003)	Managing Customers Queries	1. Discuss the importance of documenting, classifying and prioritizing customer queries	SSC/N3003	Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 5 P: 3
		Managing Customers Queries (Contd....)	1. Discuss the importance of documenting, classifying and prioritizing customer queries		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 1 P: 4
		Managing Customers Queries (Contd....)	2. Identify the common types of customer queries and how to resolve them		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 5 P: 3
		Managing Customers Queries (Contd....)	2. Identify the common types of customer queries and how to resolve them		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 0 P: 2
		Managing Customers Queries (Contd....)	3. Discuss various issues that may affect customer satisfaction		Interactive Lecture in the Class, Group Activity	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 5 P: 3

Sl. No.	Module Name	Session Name	Session Objectives	NOS Ref.	Methodology	Training Tools/Aids	Duration in Hours
		Managing Customers Queries (Contd....)	3. Discuss various issues that may affect customer satisfaction		Interactive Lecture in the Class, Group Activity	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 0 P: 3
		Managing Customers Queries (Contd....)	4. Identify different styles, approaches and questioning techniques for understanding customer queries		Interactive Lecture in the Class, Group Activity	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 5 P: 3
		Managing Customers Queries (Contd....)	4. Identify different styles, approaches and questioning techniques for understanding customer queries		Interactive Lecture in the Class, Group Activity	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 0 P: 3
3.	Knowledge of products and applications (SSC/N5101)	Software Products and Applications	1. Discuss the policies of an organization in deploying software products	SSC/N 5101	Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 4 P: 4
		Software Products and Applications (Contd....)	1. Discuss the policies of an organization in deploying software products				T: 0 P: 4

Sl. No.	Module Name	Session Name	Session Objectives	NOS Ref.	Methodology	Training Tools/Aids	Duration in Hours
		Software Products and Applications (Contd....)	2. Identify various project requirements, resources and technicalities		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 4 P: 4
		Software Products and Applications (Contd....)	2. Identify various project requirements, resources and technicalities				T: 0 P: 4
		Software Products and Applications (Contd....)	3. Explain the importance of non-disclosure agreement with stakeholders				T: 4 P: 4
		Software Products and Applications (Contd....)	3. Explain the importance of non-disclosure agreement with stakeholders		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 0 P: 2
		Software Products and Applications (Contd....)	4. Identify company hierarchy for project approval process				T: 3 P: 4
		Software Products and Applications (Contd....)	4. Identify company hierarchy for project approval process				T: 0 P: 4

Sl. No.	Module Name	Session Name	Session Objectives	NOS Ref.	Methodology	Training Tools/Aids	Duration in Hours
4.	Resolve application issues (SSC/N5101)	Project Variance and its Control Measures	1. Discuss the importance of identifying variances and how to correct/escalate variances	SSC/N5101	Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 4 P: 4
		Project Variance and its Control Measures (Contd....)			Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 4 P: 4
		Project Variance and its Control Measures (Contd....)			Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 0 P: 8
		Software Anomalies and Variables	2. Identify the standard tools and templates available for tracking software anomalies		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 4 P: 4
		Software Anomalies and Variables (Contd...)			Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 4 P: 4
		Software Anomalies and Variables (Contd...)			Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 0 P: 7



Sl. No.	Module Name	Session Name	Session Objectives	NOS Ref.	Methodology	Training Tools/Aids	Duration in Hours
		Networks, Operating Systems, and Databases	3. Identify the features of LAN, WAN, CITRIX, UNIX, IP Network, Windows Server, Active Directory etc.		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 4 P: 4
		Networks, Operating Systems, and Databases (Contd...)			Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 0 P: 5
5.	Maintain liaison with stakeholders (SSC/N5101)	Checkpoints for Software Product Deployment	1. Identify various checkpoints of a project/product deployment	SSC/N5101	Interactive Lecture in the Class, Activity	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 3 P: 5
		Checkpoints for Software Product Deployment (Contd...)	1. Identify various checkpoints of a project/product deployment				T: 0 P: 8
		Stakeholder Management (Contd...)	3. Discuss methods to update stakeholders (internal and external), and third parties about project progress				T: 3 P: 5

Sl. No.	Module Name	Session Name	Session Objectives	NOS Ref.	Methodology	Training Tools/Aids	Duration in Hours
		Stakeholder Management (Contd...)	3. Discuss methods to update stakeholders (internal and external), and third parties about project progress				T: 0 P: 8
		Organization Knowledge Base (Contd...)	2. Discuss the procedures to access organization's knowledge base for software data		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 4 P: 4
		Organization Knowledge Base (Contd...)	2. Discuss the procedures to access organization's knowledge base for software data		Interactive Lecture in the Class	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 0 P: 5

Sl. No.	Module Name	Session Name	Session Objectives	NOS Ref.	Methodology	Training Tools/Aids	Duration in Hours
7.	Inclusive and environmentally sustainable workplaces (SSC/N 9014)	Sustainable Practices	1. Describe different approaches for efficient energy resource utilization and waste management.	SSC/N 9014	Interactive Lecture in the Class, Activity	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 2 P: 5
		Sustainable Practices (Contd...)	2. Describe the importance of following the diversity policies		Interactive Lecture in the Class, Activity	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 2 P: 5
		Sustainable Practices (Contd...)	3. Identify stereotypes and prejudices associated with people with disabilities and the negative consequences of prejudice and stereotypes.		Interactive Lecture in the Class, Activity	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 3 P: 5
		Respect Diversity and Strengthen Practices to Promote Equality	4. Discuss the importance of promoting, sharing and implementing gender equality and PwD sensitivity guidelines at organization level.		Interactive Lecture in the Class, Activity	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 3 P: 5

Sl. No.	Module Name	Session Name	Session Objectives	NOS Ref.	Methodology	Training Tools/Aids	Duration in Hours
8.	Employability & Entrepreneurship Skills	Introduction to Employability Skills	<ol style="list-style-type: none"> <li>1. Discuss the Employability Skills required for jobs in various industries</li> <li>2. List different learning and employability related GOI and private portals and their usage</li> </ol>	N/A	Interactive Lecture in the Class, Activity	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 0.5 P:1
		Constitutional Values: Citizenship	<ol style="list-style-type: none"> <li>1. Explain the constitutional values, including civic rights and duties, citizenship, responsibility towards society and personal values and ethics such as honesty, integrity, caring and respecting others that are required to become a responsible citizen</li> <li>2. Show how to practice different environmentally sustainable practices</li> </ol>		Interactive Lecture in the Class, Activity	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 0.5 P:1
		Becoming a Professional in the 21st Century	<ol style="list-style-type: none"> <li>1. Discuss importance of relevant 21st century skills.</li> </ol>		Interactive Lecture in the Class, Activity	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 1 P:1.5

Sl. No.	Module Name	Session Name	Session Objectives	NOS Ref.	Methodology	Training Tools/Aids	Duration in Hours
			<ol style="list-style-type: none"> <li>1. Exhibit 21st century skills like Self-Awareness, Behaviour Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn etc. in personal or professional life.</li> <li>2. Describe the benefits of continuous learning</li> </ol>				
		Basic English Skills	<ol style="list-style-type: none"> <li>1. Show how to use basic English sentences for everyday conversation in different contexts, in person and over the telephone</li> <li>2. Read and interpret text written in basic English</li> <li>3. Write a short note/paragraph / letter/e -mail using basic English</li> </ol>		Interactive Lecture in the Class, Activity	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 4 P: 4
		Basic English Skills (Contd.)					T: 0 P: 2
		Career Development and Goal-Setting	<ol style="list-style-type: none"> <li>1. Create a career development plan with well-defined short- and long-term goals</li> </ol>		Interactive Lecture in the Class, Activity	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 1 P: 1

Sl. No.	Module Name	Session Name	Session Objectives	NOS Ref.	Methodology	Training Tools/Aids	Duration in Hours
		Communication Skills	<ol style="list-style-type: none"> <li>1. Demonstrate how to communicate effectively using verbal and nonverbal communication etiquette.</li> <li>2. Explain the importance of active listening for effective communication</li> <li>3. Discuss the significance of working collaboratively with others in a team</li> </ol>		Interactive Lecture in the Class, Activity	Participant handbook, Projector, Whiteboard, Marker, and Duster	T:2 P:3
		Diversity and Inclusion	<ol style="list-style-type: none"> <li>1. Demonstrate how to behave, communicate, and conduct oneself appropriately with all genders and PwD</li> <li>2. Discuss the significance of escalating sexual harassment issues as per POSH</li> </ol>		Interactive Lecture in the Class, Activity	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 1 P:1.5
		Financial and Legal Literacy	<ol style="list-style-type: none"> <li>1. Outline the importance of selecting the right financial institution, product, and service</li> <li>2. Demonstrate how to carry out offline and online financial transactions, safely and securely</li> </ol>		Interactive Lecture in the Class, Activity	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 2 P:3

Sl. No.	Module Name	Session Name	Session Objectives	NOS Ref.	Methodology	Training Tools/Aids	Duration in Hours
		Essential Digital Skills	1. Describe the role of digital technology in today's life 2. Demonstrate how to operate digital devices and use the associated applications and features, safely and securely		Interactive Lecture in the Class, Activity	Participant handbook, Projector, Whiteboard, Marker, and Duster	T:4 P:2
		Essential Digital Skills (Contd.)	3. Discuss the significance of displaying responsible online behaviour while browsing, using various social media platforms, e-mails, etc., safely and securely 4. Create sample word documents, excel sheets and presentations using basic features utilize virtual collaboration tools to work effectively				T:0 P:4

Sl. No.	Module Name	Session Name	Session Objectives	NOS Ref.	Methodology	Training Tools/Aids	Duration in Hours
		Entrepreneurship	<ol style="list-style-type: none"> <li>1. Explain the types of entrepreneurship and enterprises</li> <li>2. Discuss how to identify opportunities for potential business, sources of funding and associated financial and legal risks with its mitigation plan</li> <li>3. Describe the 4Ps of Marketing-Product, Price, Place and Promotion and apply them as per requirement</li> <li>4. Create a sample business plan, for the selected business opportunity</li> </ol>		Interactive Lecture in the Class, Activity	Participant handbook, Projector, Whiteboard, Marker, and Duster	T:3 P:4
		Customer Service	<ol style="list-style-type: none"> <li>1. Describe the significance of analysing different types and needs of customers</li> <li>2. Explain the significance of identifying customer needs and responding to them in a professional manner.</li> <li>3. Discuss the significance of maintaining hygiene and dressing appropriately</li> </ol>				T:2 P:3



Sl. No.	Module Name	Session Name	Session Objectives	NOS Ref.	Methodology	Training Tools/Aids	Duration in Hours
		Getting Ready for Apprenticeships and Jobs	<ol style="list-style-type: none"> <li>1. Create a professional Curriculum Vitae (CV)</li> <li>2. Use various offline and online job search sources such as employment exchanges, recruitment agencies, and job portals respectively</li> <li>3. Discuss the significance of maintaining hygiene and confidence during an interview</li> <li>4. Perform a mock interview</li> <li>5. List the steps for searching and registering for apprenticeship opportunities</li> </ol>		Interactive Lecture in the Class, Activity	Participant handbook, Projector, Whiteboard, Marker, and Duster	T: 3 P:5
<b>Total (In Hours)</b>					<b>Theory</b>		120
					<b>Practical</b>		210
					<b>On the Job Training</b>		60
					<b>*Grand Total (in Hours)</b>		390 hours

## Annexure III

### Assessment Criteria

#### CRITERIA FOR ASSESSMENT OF TRAINEES

Assessment Criteria for Technical Support Engineer	
Job Role	Technical Support Engineer
Qualification Pack	SSC/Q5101, v3.0
Sector Skill Council	IT-ITeS Sector Skills Council NASSCOM

Sr. No.	Guidelines for Assessment
1.	Criteria for assessment for each Qualifications File will be approved by the Sector Skill Council. Each Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Skills Practical for each PC.
2.	The assessment for the theory part will be based on knowledge bank of questions created by the SSC.
3.	Assessment will be conducted for all compulsory NOS, and where applicable, on the selected elective/ option NOS/ Set of NOS.
4.	Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training centre (as per assessment criteria below).
5.	Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training centre based on this criterion.
6.	To pass the Qualifications File, every trainee should score a minimum of 70 % of aggregate marks.
7.	In case of unsuccessful completion, the trainee may seek reassessment on the Qualification File.

Total Marks: 350	Compulsory NOS				
Assessable Outcomes	Assessment criteria for outcomes	Total Marks (350)	Theory Marks	Practical Marks	Viva Marks
Assessable Outcomes	Assessment Criteria for the Outcomes	Total Mark	Out of	Theory	Skills Practical
1. SSC/N3003: Deal remotely with customer queries		100	100	30	70
	PC1. Greet customers and verify their details, following organizational procedures		10	-	10
	PC2. Read carefully, summarize, and obtain customer confirmation regarding understanding of queries		5	-	5
	PC3. Express concern for any difficulties caused and show commitment to resolve queries		10	-	10
	PC4. Record and categorize queries accurately using organization's query management tool		10	-	10
	PC5. Access the knowledge base of the organization for solutions to queries, where available		10	10	-
	PC6. Resolve queries within the area of competence or authority in line with organizational guidelines and service level agreements (SLAs)		10	-	10
	PC7. Refer queries outside the area of competence or authority promptly to supervisor		15	5	10
	PC8. Obtain advice and guidance from superiors, where necessary		5	5	-
	PC9. Obtain confirmation from customers those queries have been resolved to their satisfaction		5	5	-

Total Marks: 350	Compulsory NOS				
Assessable Outcomes	Assessment criteria for outcomes	Total Marks (350)	Theory Marks	Practical Marks	Viva Marks
Assessable Outcomes	Assessment Criteria for the Outcomes	Total Mark	Out of	Theory	Skills Practical
	PC10. Record the resolution of queries accurately using the query management tool		10	5	5
	PC11. Comply with relevant standards, policies, procedures, and guidelines when dealing remotely with customer queries		10	-	10
		Total	100	30	70
2. SSC/N5101: Co-ordinate/ resolve software products/ applications issues		Total	100	20	80
	PC1. Identify project requirements, resources and stakeholders and their impact on the project	100	5	-	10
	PC2. Develop plans to meet project objectives and scope, using standard templates and tools		15	5	10
	PC3. Create progress reports as defined in plans		5	-	5
	PC4. Identify any problems with project progress and take corrective action		10	5	5
	PC5. Recommend justifiable changes to projects based on experience of work in progress		10	5	5
	PC6. Adhere to non-disclosure agreement		5	-	5
	PC7. Establish project objectives and review them with appropriate people		5	-	5

Total Marks: 350	Compulsory NOS				
Assessable Outcomes	Assessment criteria for outcomes	Total Marks (350)	Theory Marks	Practical Marks	Viva Marks
Assessable Outcomes	Assessment Criteria for the Outcomes	Total Mark	Out of	Theory	Skills Practical
	PC8. Access the organization's knowledge base to identify existing templates and relevant best practices for deployment projects		5	-	5
	PC9. Liaise with project stakeholders to ensure they get the information on time		5	-	5
	PC10. Liaise with deployment/migration teams to ensure they adhere to project timelines and resource constraints		5	-	5
	PC11. Escalate problems beyond the level of competence or authority to the next hierarchy		5	-	5
	PC12. Obtain advice and guidance from supervisors on any aspects of the project you are unsure		5	-	5
	PC13. Suggest to colleagues how deployment procedures can be improved		10	5	5
	PC14. Follow organization's policies, procedures and guidelines when coordinating the deployment of software products/applications		5	-	5
		Total	100	20	80

Total Marks: 350	Compulsory NOS				
Assessable Outcomes	Assessment criteria for outcomes	Total Marks (350)	Theory Marks	Practical Marks	Viva Marks
Assessable Outcomes	Assessment Criteria for the Outcomes	Total Mark	Out of	Theory	Skills Practical
3. SSC/N9014: Maintain an inclusive, environmentally sustainable workplace		100	10	20	80
	PC1. optimize usage of electricity/energy, materials, and water in various tasks/activities/processes and plan the implementation of energy efficient systems in a phased manner		20	5	15
	PC2. segregate recyclable, non-recyclable and hazardous waste generated for disposal or efficient waste management		20	5	15
	PC3. understand the diversity policy of the organization and use internal & external communication to colleagues to improve		15	5	10
	PC4. comply with PwD inclusive policies for an adaptable and equitable work environment		10	-	10
	PC5. improve through specifically designed recruitment practices, PwD friendly infrastructure, job roles, etc.		20	-	20
	PC6. use and advocate for appropriate verbal/nonverbal communication, schemes, and benefits of PwD		15	5	10
		Total	100	20	80

Total Marks: 350	Compulsory NOS				
Assessable Outcomes	Assessment criteria for outcomes	Total Marks (350)	Theory Marks	Practical Marks	Viva Marks
Assessable Outcomes	Assessment Criteria for the Outcomes	Total Mark	Out of	Theory	Skills Practical
Employability NOS for 60 Hours	PC1. Introduction to Employability Skills	50	2	1	1
	PC2. Constitutional values – Citizenship		2	1	1
	PC3. Becoming a Professional in the 21st Century		6	2	4
	PC4. Basic English Skills		6	2	3
	PC5. Career Development & Goal Setting		3	1	2
	PC6. Communication Skills		4	2	2
	PC7. Diversity & Inclusion		2	1	2
	PC8. Financial and Legal Literacy		5	2	3
	PC9. Essential Digital Skills		8	3	4
	PC10. Entrepreneurship		4	2	3
	PC11. Customer Service		3	1	2
	PC12. Getting Ready for Apprenticeship & Jobs		5	2	3
	Total		50	20	30

## Glossary

- **Sector:** Sector is a conglomeration of different business operations having similar business and interests. It may also be defined as a distinct subset of the economy whose components share similar characteristics and interests.
- **Sub-sector:** Sub-sector is derived from a further breakdown based on the characteristics and interests of its components.
- **Occupation:** Occupation is a set of job roles, which perform similar/ related set of functions in an industry. **Job role:** Job role defines a unique set of functions that together form a unique employment opportunity in an organization.
- **Occupational Standards (OS):** OS specify the standards of performance an individual must achieve when carrying out a function in the workplace, together with the Knowledge and Understanding (KU) they need to meet that standard consistently. Occupational Standards are applicable both in the Indian and global contexts.
- **Performance Criteria (PC):** Performance Criteria (PC) are statements that together specify the standard of performance required when carrying out a task.
- **National Occupational Standards (NOS):** NOS are occupational standards which apply uniquely in the Indian context.
- **Qualifications Pack (QP):** QP comprises the set of OS, together with the educational, training and other criteria required to perform a job role. A QP is assigned a unique qualifications pack code.
- **Unit Code:** Unit code is a unique identifier for an Occupational Standard, which is denoted by an 'N'
- **Unit Title:** Unit title gives a clear overall statement about what the incumbent should be able to do.
- **Description:** Description gives a short summary of the unit content. This would be helpful to anyone searching on a database to verify that this is the appropriate OS they are looking for.
- **Scope:** Scope is a set of statements specifying the range of variables that an individual may have to deal with in carrying out the function which have a critical impact on quality of performance required.
- **Knowledge and Understanding (KU):** Knowledge and Understanding (KU) are statements which together specify the technical, generic, professional and organizational specific knowledge that an individual needs in order to perform to the required standard.
- **Organizational Context:** Organizational context includes the way the organization is structured and how it operates, including the extent of operative knowledge managers have of their relevant areas of responsibility.
- **Technical Knowledge:** Technical knowledge is the specific knowledge needed to accomplish specific designated responsibilities.
- **Core Skills/ Generic Skills (GS):** 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.
- **Electives:** 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.



- Options: 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.



**Skill India**

कौशल भारत - कुशल भारत



सत्यमेव जयते  
GOVERNMENT OF INDIA  
MINISTRY OF SKILL DEVELOPMENT  
& ENTREPRENEURSHIP



N.S.D.C.  
National  
Skill Development  
Corporation  
Transforming the skill landscape



Scan this QR Code to access eBook



**IT - ITes SSC**  
**NASSCOM**

**Address:** IT - ITes Sector Skill Council NASSCOM, Plot No -7 to 10, Sector 126, Noida,  
UP - 201303  
**Email:** [ssc@nasscom.in](mailto:ssc@nasscom.in)  
**Phone:** 0120 4990172