







Model Curriculum

QP Name: IT Helpdesk Attendant

QP Code: SSC/Q0110

Version: 4.0

NSQF Level: 3.0

Model Curriculum Version: 4.0

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Training Parameters

Sector	IT-ITeS
Sub-Sector	IT Services
Occupation	IT Support Services/Helpdesk
Country	India
NSQF Level	3
Aligned to NCO/ISCO/ISIC Code	NCO-2015/3512.0101
Minimum Educational Qualification and Experience	10th Grade Pass OR 10th Class Pursuing OR 8th Grade Pass with 3 years of relevant experience* *Relevant Experience: Computer Operation The relevant experience would include work, internship and apprenticeship after completion of relevant educational qualification.
Pre-Requisite License or Training	Training programs in customer orientation, dealing with difficult customers, Telephone etiquettes etc.
Minimum Job Entry Age	15 years
Last Reviewed On	18-02-2025
Next Review Date	18-02-2028
NSQC Approval Date	18-02-2025
QP Version	4.0
Model Curriculum Creation Date	18-02-2025
Model Curriculum Valid Up to Date	18-02-2028
Model Curriculum Version	4.0
Minimum Duration of the Course	360 Hours
Maximum Duration of the Course	360 Hours







Program Overview

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

Training Outcomes

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

- Explain how to monitor, validate, and categorize IT service requests or incidents using organizational tools.
- Describe methods to resolve IT incidents using Generative AI, troubleshoot devices, and ensure compliance with SLAs.
- Discuss escalation protocols, customer communication techniques, and documentation processes.
- Discuss the Employability and Entrepreneurship Skills.

Compulsory Modules

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

NOS and Module Details	Theory Duration (Hours)	Practical Duration (Hours)	On-the-Job Training Duration (Mandatory) (Hours)	On-the-Job Training Duration (Recommended) (Hours)	Total Duration (Hours)
SSC/N0202: Deal Directly with IT Service Requests/Incidents NOS Version No.: 4.0 NSQF Level: 3.0	90:00	180:00	60:00	00:00	330:00
Module 1: Introduction to the IT-ITeS/BPM Industry and the job role of an IT Helpdesk Attendant	05:00	00:00	00:00	00:00	05:00
Module 2: Monitoring and Categorizing IT Service Requests/Incidents	25:00	60:00	20:00	00:00	105:00
Module 3: Resolving IT Service Requests and Ensuring Security	20:00	60:00	20:00	00:00	100:00
Module 4: Customer Interaction, Escalation, and Collaboration	20:00	30:00	10:00	00:00	60:00
Module 5: Documentation, Compliance, and Generative AI Tools	20:00	30:00	10:00	00:00	60:00
DGT/VSQ/N0101: Employability Skills (30 Hours) NOS Version No.: 1.0 NSQF Level: 2.0	30:00	00:00	00:00	00:00	30:00







Module 6: Employability Skills (30 Hours)	30:00	00:00	00:00	00:00	30:00
Total Duration	120:00	180:00	60:00	00:00	360:00







Module Details

Module 1: Introduction to IT-ITeS/BPM Industry and the Job Role of an IT Helpdesk Attendant

Mapped to SSC/N0202, v4.0

Terminal Outcomes:

- Explain the importance of IT-ITeS/BPM Industries.
- Discuss the roles and responsibilities of an IT Helpdesk Attendant.

ration (in hours): 05:00	Duration (in hours): 00:00
eory – Key Learning Outcomes	Practical – Key Learning Outcomes
Define the IT-ITeS/BPM industry.	-
Describe the various sub-sectors within the IT-ITeS/BPM industry.	
Discuss the scope of employment in the IT-ITeS/BPM industry.	
Describe the roles and responsibilities of an IT Helpdesk Attendant for the smooth operation of an organization's IT systems.	
Discuss the basics of providing technical support and troubleshooting hardware and software issues.	
Discuss the future trends and career growth opportunities for an IT Helpdesk Attendant.	

Training Kit - Facilitator's Guide, Participant's Handbook, Presentations and Software, Whiteboard, Marker, Projector, Laptop, Video Films

Tools, Equipment and Other Requirements

Nil







Module 2: Monitoring and Categorizing IT Service Requests/Incidents Mapped to SSC/N0202, v4.0

Terminal Outcomes:

- Explain how to monitor and validate IT service requests or incidents using organizational tools.
- Describe the process of categorizing IT service requests or incidents accurately.

Duration (in hours): 25:00	Duration (in hours): 60:00		
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes		
 Explain the organization's policies,	 Demonstrate how to monitor systems to		
procedures, and guidelines for IT service	identify automated alerts and customer		
management.	service requests using designated tools.		
 Describe the types of IT service requests	 Show how to validate automated alerts		
and incidents encountered in typical	to confirm genuine incidents requiring		
scenarios.	action.		
 Elucidate the tools and systems used to	 Demonstrate the use of organizational		
track, categorize, and resolve service	tools and procedures to record and		
requests or incidents.	acknowledge service requests or		
 Discuss the importance of adhering to	 Show how to collect and document		
service-level agreements (SLAs) in IT	detailed customer information to		
service management.	accurately identify the nature and scope		
 Explain the process of monitoring systems to identify automated alerts and customer service requests. 	of incidents. • Demonstrate the classification of		
 Describe how to validate automated alerts to determine genuine incidents requiring action. 	incidents based on system alerts and customer inputs using organizational tools.		
 Discuss the techniques for collecting	 Show how to align categorization of		
detailed customer information to identify	incidents with organizational policies and		
the scope and nature of incidents.	SLAs.		
 Explain the process of analyzing system alerts and customer inputs to classify incidents appropriately. 			

Classroom Aids

Training Kit - Facilitator's Guide, Participant's Handbook, Presentations and Software, Whiteboard, Marker, Projector, Laptop, Video Films

Tools, Equipment and Other Requirements

System Monitoring Tools (e.g., Nagios, Prometheus, Icinga, etc.), Customer Relationship Management (CRM) Software (e.g., SuiteCRM, Odoo CRM, EspoCRM, etc.), Incident Management Tools (e.g., OTRS, Request Tracker (RT), Helpy, etc.)







Module 3: Resolving IT Service Requests and Ensuring Security Mapped to SSC/N0202, v4.0

Terminal Outcomes:

- Explain how to resolve IT service requests using effective solutions and appropriate tools, ensuring system functionality and security.
- Describe how to troubleshoot mobile device issues and mitigate cybersecurity threats to protect user systems and data.

Classroom Aids

Training Kit - Facilitator's Guide, Participant's Handbook, Presentations and Software, Whiteboard, Marker, Projector, Laptop, Video Films

Tools, Equipment and Other Requirements

System Monitoring Tools (e.g., Nagios, Prometheus, Icinga, etc.), Customer Relationship Management (CRM) Software (e.g., SuiteCRM, Odoo CRM, EspoCRM, etc.), Generative AI Tools (e.g., OpenAI GPT, GPT-Neo, GPT-J, etc.)







Module 4: Customer Interaction, Escalation, and Collaboration Mapped to SSC/N0202, v4.0

Terminal Outcomes:

- Explain how to manage customer queries and complaints to ensure effective resolution and satisfaction.
- Describe the process of collaborating with stakeholders and escalating issues appropriately for timely resolution.

Duration (in hours): 20:00	Duration (in hours): 30:00	
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes	
 Explain the process of escalating service	 Demonstrate how to escalate service	
requests and incidents that fall outside	requests or incidents when necessary,	
your expertise or authority.	following the proper procedure.	
 Describe the importance of effective	 Show how to effectively collaborate with	
collaboration with peers and technical	team members to resolve complex	
teams for successful issue resolution.	issues.	
 Discuss the role of clear communication	 Demonstrate the ability to communicate	
and empathy in explaining technical	technical information in a simple, non-	
solutions to non-technical users.	technical manner to customers.	
 Elucidate the significance of active	 Show how to actively listen to customer	
listening and professionalism when	queries, ensuring full understanding of	
addressing customer concerns and	their concerns.	
 complaints. Explain how to confirm customer satisfaction before closing the service request. 	 Demonstrate professionalism and empathy while handling customer complaints and ensuring issue resolution. 	

Classroom Aids

Training Kit - Facilitator's Guide, Participant's Handbook, Presentations and Software, Whiteboard, Marker, Projector, Laptop, Video Films

Tools, Equipment and Other Requirements

System Monitoring Tools (e.g., Nagios, Prometheus, Icinga, etc.), Customer Relationship Management (CRM) Software (e.g., SuiteCRM, Odoo CRM, EspoCRM, etc.), Ticketing Systems (e.g., Zendesk, osTicket, Faveo Helpdesk, etc.)







Module 5: Documentation, Compliance, and Generative AI Tools *Mapped to SSC/N0202, v4.0*

Terminal Outcomes:

- Explain how to document the resolution process and outcomes in accordance with organizational standards, policies, and SLAs.
- Describe how to utilize Generative AI tools to automate categorization, generate responses, and enhance overall incident resolution efficiency.

Duration (in hours): 20:00	Duration (in hours): 30:00	
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes	
 Explain the significance of proper documentation and adherence to organizational policies in IT service management. Describe the role of Generative AI tools in automating service request categorization and enhancing resolution efficiency. Discuss the importance of continuous improvement in IT service management and the potential of Generative AI for optimization. Elucidate the best practices for utilizing Generative AI tools to improve IT service management processes. 	 Demonstrate how to document resolution processes and outcomes for incidents using organizational tools. Show how to apply the fundamentals of Generative AI tools to enhance IT help desk operations and service delivery. Demonstrate how to utilize Generative AI for automating ticket categorization, generating prompt responses, and creating accurate incident documentation. Demonstrate how to optimize prompt engineering techniques and identify opportunities to improve the speed and accuracy of issue resolution using Generative AI. 	

Classroom Aids

Training Kit - Facilitator's Guide, Participant's Handbook, Presentations and Software, Whiteboard, Marker, Projector, Laptop, Video Films

Tools, Equipment and Other Requirements

System Monitoring Tools (e.g., Nagios, Prometheus, Icinga, etc.), Customer Relationship Management (CRM) Software (e.g., SuiteCRM, Odoo CRM, EspoCRM, etc.), Generative AI Tools (e.g., OpenAI GPT, GPT-Neo, GPT-J, etc.)







Module 6: Employability Skills (30 Hours) Mapped to DGT/VSQ/N0101, v1.0

Duration: 30:00 Hours

Key Learning Outcomes

Introduction to Employability Skills Duration: 1 Hour

After completing this programme, participants will be able to:

1. Discuss the importance of Employability Skills in meeting the job requirements

Constitutional values - Citizenship Duration: 1 Hour

- 2. Explain constitutional values, civic rights, duties, citizenship, responsibility towards society etc. that are required to be followed to become a responsible citizen.
- 3. Show how to practice different environmentally sustainable practices

Becoming a Professional in the 21st Century Duration: 1 Hour

- 4. Discuss 21st-century skills.
- 5. Display a positive attitude, self-motivation, problem-solving, time management skills and continuous learning mindset in different situations.

Basic English Skills Duration: 2 Hours

6. Use appropriate basic English sentences/phrases while speaking

Communication Skills Duration: 4 Hours

- 7. Demonstrate how to communicate in a well-mannered way with others.
- 8. Demonstrate working with others in a team

Diversity & Inclusion Duration: 1 Hour

- 9. Show how to conduct oneself appropriately with all genders and PwD
- 10. Discuss the significance of reporting sexual harassment issues in time

Financial and Legal Literacy Duration: 4 Hours

- 11. Discuss the significance of using financial products and services safely and securely.
- 12. Explain the importance of managing expenses, income, and savings.
- 13. Explain the significance of approaching the concerned authorities in time for any exploitation as per legal rights and laws

Essential Digital Skills Duration: 3 Hours

- 14. Show how to operate digital devices and use the associated applications and features, safely and securely
- 15. Discuss the significance of using the internet for browsing, and accessing social media platforms, safely and securely







Entrepreneurship Duration: 7 Hours

16. Discuss the need for identifying opportunities for potential business, sources for arranging money and potential legal and financial challenges

Customer Service Duration: 4 Hours

- 17. Differentiate between types of customers
- 18. Explain the significance of identifying customer needs and addressing them
- 19. Discuss the significance of maintaining hygiene and dressing appropriately

Getting ready for Apprenticeship & Jobs Duration: 2 Hours

- 20. Create a biodata
- 21. Use various sources to search and apply for jobs
- 22. Discuss the significance of dressing up neatly and maintaining hygiene for an interview
- 23. Discuss how to search and register for apprenticeship opportunities







Module 7: On-the-Job Training Mapped to IT Helpdesk Attendant

Mandatory Duration (in hours): 60:00 Recommended Duration (in hours): 00:00

Location: On-Site

Terminal Outcomes

- Demonstrate how to monitor IT service requests and validate automated alerts to confirm genuine incidents.
- Show how to analyze customer inputs and system alerts to categorize incidents accurately.
- Demonstrate resolving IT incidents efficiently by applying organizational guidelines, standard scripts, and Generative AI tools.
- Show how to configure, troubleshoot, and maintain mobile device settings, operating systems, and applications.
- Demonstrate strategies for diagnosing and resolving hardware-related and connectivity issues on mobile devices.
- Show how to implement strategies to protect user systems and data from cybersecurity threats like phishing and malware.
- Demonstrate how to escalate incidents beyond expertise and collaborate effectively with technical teams.
- Show how to interact empathetically with customers, explain technical solutions in simple terms, and confirm resolution before closing requests.
- Demonstrate process of documenting incidents, adhering to organizational policies, and meeting SLAs.
- Show how to apply Generative AI tools for ticket categorization, automated responses, and improving incident resolution efficiency.
- Demonstrate creation of a product/solution strategy and management of its development lifecycle.
- Show how to collect and finalize business requirements through effective client interaction.
- Demonstrate methods to finalize an MVP that aligns with the business requirements.
- Show how to define & measure KPIs for software performance, usability, & conversion rates.
- Demonstrate steps involved in creating a successful go-to-market strategy for products or solutions.
- Show how to define and implement strategies to enhance customer engagement and retention.
- Demonstrate the creation and execution of a project charter and monitoring related KPIs.
- Show effective methods for building and maintaining positive workplace relationships.
- Demonstrate strategies for managing team performance to ensure project goals are achieved.
- Show how to collaborate effectively with stakeholders to ensure successful project outcomes.
- Demonstrate techniques for developing employability and entrepreneurship skills in a professional environment.







Annexure

Trainer Requirements

1.	Trainer's Qualification and experience in the relevant sector (in years) (as per NCVET guidelines)	Educational Qualification: Graduate in any discipline. Industry & Training Experience: 2 years of industry experience in IT support services. Certification: "Trainer" mapped to the Qualification Pack "MEP/Q2601 Minimum accepted score is 80% aggregate.
2.	Master Trainer's Qualification and experience in the relevant sector (in years) (as per NCVET guidelines)	Educational Qualification: Graduate in any discipline. Industry & Training Experience: 4 years of industry experience in IT support services. Certification:" Master Trainer" mapped to the Qualification Pack "MEP/Q2602" Minimum accepted score is 90% aggregate.
3.	Tools and Equipment Required for Training	⊠Yes □No (If "Yes", details to be provided in Annexure)
4.	In Case of Revised Qualification, Details of Any Upskilling Required for Trainer	NA







Assessor Requirements

1.	Assessor's Qualification and experience in relevant sector (in years) (as per NCVET guidelines)	Educational Qualification: Graduate in any discipline. Industry & Training Experience: 2 years of industry experience in IT support services. Certification: "Assessor" mapped to the Qualification Pack "MEP/Q2701" Minimum accepted score is 80% aggregate.
2.	Proctor's Qualification and experience in relevant sector (in years) (as per NCVET guidelines), (wherever applicable)	Educational Qualification: Graduate in any discipline. Industry & Training Experience: 2 years of industry experience in IT support services. Certification: "Assessor" mapped to the Qualification Pack "MEP/Q2701" Minimum accepted score is 80% aggregate.
3.	Lead Assessor's/Proctor's Qualification and experience in relevant sector (in years) (as per NCVET guidelines)	Educational Qualification: Graduate in any discipline. Industry & Training Experience: 4 years of industry experience in IT support services. Certification: "Lead Assessor" mapped to the Qualification Pack "MEP/Q2702" Minimum accepted score is 90% aggregate.
4.	Assessment Mode (Specify the assessment mode)	The assessment will consist of a blend of hands-on practical evaluations, viva-voce, and online proctored scenario-based multiple-choice questions ensuring a thorough evaluation of the individual's proficiency in learning outcomes, practical understanding, and real-world application of concepts.
5.	Tools and Equipment Required for Assessment	







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.

Batch Creation & Assessment Request:

Training Providers (TP) or Training Centers (TC), including any other authorized partner of Ministry/ Department create batches / push batches on the SIDH portal. Assessment requests are submitted through the SIDH portal or via email or other media as authorized from time to time. For NON-SIDH schemes, assessment requests are received electronically or through respective State Skill Mission portals. TP/TC initiates the assessment request through the InSDMS portal and processes the payment (where applicable).

Batch Alignment & Confirmation:

Upon payment confirmation, batches are assigned to the Assessment Agency based on factors like:

- Assessment readiness
- Availability of certified assessors for the specific job role
- Assessment capping to an assessment agency as prescribed from time to time for an AB
 An email communication / prescribed mode communication is sent to TP/TC for
 confirmation of the assessment date, with IT-ITeS SSC in the loop. Once confirmation is
 received, the Assessment Agency designates a TOA-certified assessor to conduct or
 facilitate the assessment.
- Batches are only formed when the Qualification is active.

Candidate Verification & Assessment Execution:

Candidate details are verified and documented at the beginning of the assessment by a certified assessor. A Quality Assurance (QA) mechanism is enforced, requiring an undertaking from the TC. Regular feedback is collected from TP/TC to ensure continuous improvement.

Evidence Collection & Validation:

Proctors or assessors capture date/time-stamped and geo-tagged photographs of the assessment location during the process. Attendance is also ensured offline. A PC-wise result analysis is conducted to refine assessment standards.

Monitoring & Compliance:

Batch monitoring follows established protocols, ensuring adherence to assessment guidelines. Sample based surprise visits are conducted at TC locations during both training and assessments to verify compliance. This structured approach ensures transparency, quality control, and validation throughout the assessment process.

Testing Environment:

- Check the Assessment location, date and time
- If the batch size is more than 30, then there should be 2 Assessors.
- Check that the allotted time to the candidates to complete Theory & Practical Assessment is correct.







Assessment Quality Assurance levels/Framework:

IT-ITeS SSC nasscom is responsible for the development and periodic review of the question bank developed for a specific job role. We publish an openly accessible sample /model question paper on our website for all stakeholders. The quality of the Question Bank created by the assessment designer is validated by a Subject matter experts on the following parameters:

- Appropriateness of the Question Bank in terms of facts, data and information.
- Checks for grammar, spellings, scripting and formatting.
- The information provided should be specific enough to remove any ambiguity in answers/solutions to the question.
- Relevance Assessing the topic well w.r.t. the job role.
- Check if the difficulty level of each question is as per the matrix.
- Check if the images used in the question are clear and relevant.
- All variables, symbols and abbreviations used must be declared.
- The correct answer option should be unique, and the options should not be overlapping







References

Glossary

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







Acronyms and Abbreviations

Term	Description
NOS	National Occupational Standard(s)
NSQF	National Skills Qualifications Framework
QP	Qualifications Pack
TVET	Technical and Vocational Education and Training
IT-ITeS	Information Technology - Information Technology enabled Services
AI	Artificial Intelligence
SLA	Service Level Agreement
PC	Performance Criteria
OJT	On-the-Job Training
CRM	Customer Relationship Management
KPI	Key Performance Indicators
UI	User Interface
UX	User Experience
NLP	Natural Language Processing
CLV	Customer Lifetime Value
ROI	Return on Investment
CMS	Content Management System
DBMS	Database Management System
IoT	Internet of Things
SEO	Search Engine Optimization
VPN	Virtual Private Network
CST	Customer Support Tools
ERP	Enterprise Resource Planning
NOS	National Occupational Standard(s)