



IT - ITes SSC
NASSCOM



Model Curriculum

QP Name: DOMESTIC BIOMETRIC DATA OPERATOR

QP Code: SSC/Q2213

QP Version: 3.0

NSQF Level: 3

Model Curriculum Version: 3.0

IT-ITes Sector Skills Council NASSCOM | Plot No – 7, 8, 9 & 10, Sector 126, Noida, UP.
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Training Parameters

Sector	IT-ITeS
Sub-Sector	Business Process Management
Occupation	CRM
Country	India
NSQF Level	3
Aligned to NCO/ISCO/ISIC Code	NCO-2015/3511.0101
Minimum Educational Qualification and Experience	10th Class OR NSQF Level 2 STT with 1 year Experience in computer operation
Pre-Requisite License or Training	Training programs and certifications in biometric system management, hardware management, routing and switching, network management, customer orientation, dealing with difficult customers, etc.
Minimum Job Entry Age	15 Years
Last Reviewed On	17-11-2022
Next Review Date	17-11-2025
NSQC Approval Date	17-11-2022
QP Version	3.0
Model Curriculum Creation Date	17-11-2022
Model Curriculum Valid Up to Date	17-11-2025
Model Curriculum Version	3.0
Minimum Duration of the Course	450 hours
Maximum Duration of the Course	450 hours

Program Overview

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

Training Outcomes

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

- Explain data entry services, procedures, and the policies applicable for the purpose.
- Inspect the data being entered from multiple sources to check authenticity and remove errors.
- Identify software requirements to collate data in a systematic format.
- Design suitable plan of action to capture various details like facial expression, iris, fingerprints, electronic signatures, and press print of individuals.
- Evaluate helpdesk feedback system and its importance.
- Categorize and examine the essential steps required to analyse biometric data.
- Examine common errors and plan to mitigate the same.
- Illustrate proper ways of maintaining confidentiality of storing security and back up files for future use.
- Demonstrate application of various solutions for different types of incidents/service requests.
- Demonstrate effective communication and collaboration with colleagues.
- Apply measures to maintain standards of health and safety at the workplace.
- Develop strong relationships at the workplace through effective communication and conflict management.

Compulsory Modules

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

NOS and Module Details	Theory Duration (In hours)	Practical Duration (In hours)	On-the-Job Training Duration (Mandatory)	On-the-Job Training Duration (Recommended)	Total Duration (In hours)
SSC/N3023 - Undertake Bio-Metric data entry and processing NOS Version No. 2 NSQF Level 3	94:00	236:00	00:00	00:00	330:00
Module 1: Concept of biometric data entry	12:00	36:00	00:00	00:00	48:00
Module 2: Software requirement for biometric operations	12:00	29:00	00:00	00:00	41:00



Module 3: Biometric data entry process	15:00	40:00	00:00	00:00	55:00
Module 4: Troubleshooting in biometric data entry	13:00	34:00	00:00	00:00	47:00
Module 5: Assisting in data entry process	15:00	34:00	00:00	00:00	49:00
Module 6: Skillsets of biometric data entry services	12:00	31:00	00:00	00:00	43:00
Module 7: Incident Management in biometric process	15:00	32:00	00:00	00:00	47:00
Employability Skill 60 Hours	24:00	36:00	00:00	00:00	60:00
Module 8: Introduction to Employability Skills	00:30	01:00	00:00	00:00	01:30
Module 9: Constitutional values - Citizenship	00:30	01:00	00:00	00:00	01:30
Module 10: Becoming a Professional in the 21st Century	01:00	01:30	00:00	00:00	02:30
Module 11: Basic English Skills	04:00	06:00	00:00	00:00	10:00
Module 12: Career Development & Goal Setting	01:00	01:00	00:00	00:00	02:00
Module 13: Communication Skills	02:00	03:00	00:00	00:00	05:00
Module 14: Diversity & Inclusion	01:00	01:30	00:00	00:00	02:30
Module 15: Financial and Legal Literacy	02:00	03:00	00:00	00:00	05:00
Module 16: Essential Digital Skills	04:00	06:00	00:00	00:00	10:00
Module 17: Entrepreneurship	03:00	04:00	00:00	00:00	07:00
Module 18: Customer Service	02:00	03:00	00:00	00:00	05:00
Module 19: Getting ready for apprenticeship & Jobs	03:00	05:00	00:00	00:00	08:00
OJT	00:00	00:00	60:00	00:00	60:00
Total	118:00	272:00	60:00	00:00	450:00

Module Details

Module 1: Concept of Biometric Data Entry

Mapped to SSC/N3023, v2.0

Training Outcomes:

- Explain biometric data entry services, procedures, and the policies applicable for the purpose.
- Analyse the method of information gathering for date entry purpose.

Duration: 12:00(In Hours)	Duration: 36:00(In Hours)
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Identify the biometric data entry procedures, tools, and techniques. • Identify the role and importance of the biometric data operator in supporting business operations. 	<ul style="list-style-type: none"> • Design plans to collate specific information/data from customer/ client to be entered. • Perform a service request, basis standard policies to be adhered to. • Examine the specific differences between standard data entry and biometric entries.
Classroom Aids:	
Whiteboard and Markers Chart paper and sketch pens LCD Projector and Laptop for presentations	
Tools, Equipment and Other Requirements:	
Labs equipped with the following: PCs/Laptops Internet with Wi-Fi (Min 2 Mbps Dedicated) Microphone / voice system for lecture and class activities Computer Lab with 1:1 PC: trainee ratio and having internet connection, MS Office / Open office, Browser, Outlook / Any other Email Client, and chat tools	

Module 2: Software Requirement for Biometric Operations

Mapped to SSC/N3023, v2.0

Training Outcomes:

- Inspect the data being entered from multiple sources to check authenticity and remove errors.
- Identify the software requirements to collate data from a biometric perspective.

Duration: 12:00(In Hours)	Duration: 29:00(In Hours)
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Classify different software needed for report writing including MS office suite or open office. • Distinguish between various types of data formats using database management software. 	<ul style="list-style-type: none"> • Verify data from multiple sources before entry. • Analyse the transcribed data with the source document for any corrections required like missing values, incorrect data types, etc. • Use identification and access control in biometrics for capturing end user information.
Classroom Aids:	
Whiteboard and Markers Chart paper and sketch pens LCD Projector and Laptop for presentations	
Tools, Equipment and Other Requirements:	
Labs equipped with the following: PCs/Laptops Internet with Wi-Fi (Min 2 Mbps Dedicated) Microphone / voice system for lecture and class activities Computer Lab with 1:1 PC: trainee ratio and having internet connection, MS Office / Open office, Browser, Outlook / Any other Email Client, and chat tools	

Module 3: Biometric Data Entry Process

Mapped to SSC/N3023, v2.0

Training Outcomes:

- Design suitable plan of action to capture various details like facial expression, iris, fingerprints, electronic signatures, and press print of individuals.
- Evaluate helpdesk feedback system and its importance with appropriate SLA.

Duration: 15:00(In Hours)	Duration: 40:00(In Hours)
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Discuss the adequacy of existing helpdesk feedback systems. • Organize source documents and files relative to the data entered. 	<ul style="list-style-type: none"> • Collate valid demographic data of individuals including proof of address, identity proof, etc. for database maintenance. • Observe the use of facial expression, iris of individuals and their fingerprint for biometric entry. • Perform biometric processing to include prints, electronic photographs, electronic signatures, and press print. • Undertake the process of scanning documents and transcription of data into system. • Maintain proper security, storage and back up of data files.
Classroom Aids:	
Whiteboard and Markers Chart paper and sketch pens LCD Projector and Laptop for presentations	
Tools, Equipment and Other Requirements:	
Labs equipped with the following: PCs/Laptops Internet with Wi-Fi (Min 2 Mbps Dedicated) Microphone / voice system for lecture and class activities Computer Lab with 1:1 PC: trainee ratio and having internet connection, MS Office / Open office, Browser, Outlook / Any other Email Client, and chat tools	

Module 4: Troubleshooting in Biometric Data Entry

Mapped to SSC/N3023, v2.0

Training Outcomes:

- Categorize and examine the essential steps required to analyse biometric data.
- Examine common errors and plan to mitigate the same.

Duration: 13:00(In Hours)	Duration: 34:00(In Hours)
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Identify typical problems raised by customers. • Discuss solutions and their mitigation for the problems raised. 	<ul style="list-style-type: none"> • Examine the common errors in data entry including transcription and transposition error. • Observe nature of errors like volume spikes, slow turnaround, format issues, etc. and their root causes. • Determine principles of biometric system error rates including false accept, false reject, false match, false non match, equal error rate, detection error trade-off curve. • Plan an error mitigation program. • Maintain files of source documents or other information relative to data entered for future use.
Classroom Aids:	
Whiteboard and Markers Chart paper and sketch pens LCD Projector and Laptop for presentations	
Tools, Equipment and Other Requirements:	
Labs equipped with the following: PCs/Laptops Internet with Wi-Fi (Min 2 Mbps Dedicated) Microphone / voice system for lecture and class activities Computer Lab with 1:1 PC: trainee ratio and having internet connection, MS Office / Open office, Browser, Outlook / Any other Email Client, and chat tools	

Module 5: Assisting Data Entry Process

Mapped to SSC/N3023, v2.0

Training Outcomes:

- Estimate a suitable timeline for completing data entry.
- Summarize various back-up duties required for the data entry process.

Duration: 15:00(In Hours)	Duration: 34:00(In Hours)
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Summarize the importance of documenting, classifying, prioritizing service requests and crowd management. • Discuss about the OSI model of networking and back-up related jobs. 	<ul style="list-style-type: none"> • Plan methods to collate the right information from the customer for assisting data entry process. • Manage PC configuration, networking, network admin, layers of networking, etc. • Implement various back-up to be performed.
Classroom Aids:	
Whiteboard and Markers Chart paper and sketch pens LCD Projector and Laptop for presentations	
Tools, Equipment and Other Requirements:	
Labs equipped with the following: PCs/Laptops Internet with Wi-Fi (Min 2 Mbps Dedicated) Microphone / voice system for lecture and class activities Computer Lab with 1:1 PC: trainee ratio and having internet connection, MS Office / Open office, Browser, Outlook / Any other Email Client, and chat tools	

Module 6: Skillsets of Biometric Data Entry Services

Mapped to SSC/N3023, v2.0

Training Outcomes:

- Understand proper ways of expediting data entry process through use of advanced software.
- Demonstrate application that assist in quick data entry process.

Duration: 12:00(In Hours)	Duration: 31:00(In Hours)
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Identify various questioning techniques for better understanding of an issue. • Discuss various work methodologies to expedite data entry. • Create a Frequently Asked Questions - FAQ for customer facing issues. 	<ul style="list-style-type: none"> • Demonstrate effective use of information technology to input/extract data results. • Use proper data validation and error detection mechanisms. • Evaluate the purpose of software, including Ninox, Piesync, AutoEntry, etc., in data entry process.
Classroom Aids:	
Whiteboard and Markers Chart paper and sketch pens LCD Projector and Laptop for presentations	
Tools, Equipment and Other Requirements:	
Labs equipped with the following: PCs/Laptops Internet with Wi-Fi (Min 2 Mbps Dedicated) Microphone / voice system for lecture and class activities Computer Lab with 1:1 PC: trainee ratio and having internet connection, MS Office / Open office, Browser, Outlook / Any other Email Client, and chat tools	

Module 7: Incident Management in Biometric Process

Mapped to SSC/N3023, v2.0

Training Outcomes:

- Illustrate proper ways of maintaining confidentiality of storing security and back up files for future use.
- Determine various solutions for different types of incidents/service requests.

Duration: 15:00(In Hours)	Duration: 32:00(In Hours)
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Discuss the various types of incidents during process flow, storage, applications, and security. • Use Error cluster analysis and data event analysis to minimize incidents via analysis of the targeted data. 	<ul style="list-style-type: none"> • Design frameworks to operate with both internal and external specialists for support in order to perform correct incident management. • Apply direct or workaround solutions to typical customer problems. • Analyse probable solutions for database error management and database access management. • Examine typical response times and service times for problems through incident management tool.
Classroom Aids:	
Whiteboard and Markers Chart paper and sketch pens LCD Projector and Laptop for presentations	
Tools, Equipment and Other Requirements:	
Labs equipped with the following: PCs/Laptops Internet with Wi-Fi (Min 2 Mbps Dedicated) Microphone / voice system for lecture and class activities Computer Lab with 1:1 PC: trainee ratio and having internet connection, MS Office / Open office, Browser, Outlook / Any other Email Client, and chat tools	

Module 8: Introduction to Employability Skills

Mapped to NOS 60 Hours (Version No. 1)

Key Learning Outcomes:

- Discuss the Employability Skills required for jobs in various industries
- List different learning and employability related GOI and private portals and their usage

Duration:1.5 Hours (0.5 Theory + 1 Practical)

Module 9: Constitutional values - Citizenship

Mapped to NOS 60 Hours (Version No. 1)

Key Learning Outcomes:

- 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
- Show how to practice different environmentally sustainable practices

Duration:1.5 Hours (0.5 Theory + 1 Practical)

Module 10: Becoming a Professional in the 21st Century

Mapped to NOS 60 Hours (Version No. 1)

Key Learning Outcomes:

- Discuss importance of relevant 21st century skills.
- 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.
- Describe the benefits of continuous learning

Duration:2.5 Hours (1 Theory + 1.5 Practical)

Module 11: Basic English Skills

Mapped to NOS 60 Hours (Version No. 1)

Key Learning Outcomes:

- Show how to use basic English sentences for everyday conversation in different contexts, in person and over the telephone
- Read and interpret text written in basic English
- Write a short note/paragraph / letter/e -mail using basic English

Duration: 10 Hours (4 Theory + 6 Practical)

Module 12: Career Development and Goal Setting

Mapped to NOS 60 Hours (Version No. 1)

Key Learning Outcomes:

- Create a career development plan with well-defined short- and long-term goals

Duration: 2 Hours (1 Theory + 1 Practical)



Module 13: Communication skills

Mapped to NOS 60 Hours (Version No. 1)

Key Learning Outcomes:

- Demonstrate how to communicate effectively using verbal and nonverbal communication etiquette.
- Explain the importance of active listening for effective communication
- Discuss the significance of working collaboratively with others in a team

Duration: 5 Hours (2 Theory + 3 Practical)

Module 14: Diversity and Inclusion

Mapped to NOS 60 Hours (Version No. 1)

Key Learning Outcomes:

- Demonstrate how to behave, communicate, and conduct oneself appropriately with all genders and PwD
- Discuss the significance of escalating sexual harassment issues as per POSH

Duration: 2.5 Hours (1 Theory+ 1.5 Practical)

Module 15: Financial and Digital Literacy

Mapped to NOS 60 Hours (Version No. 1)

Key Learning Outcomes:

- Outline the importance of selecting the right financial institution, product, and service
- Demonstrate how to carry out offline and online financial transactions, safely and securely

Duration: 5 Hours (2 Theory+ 3 Practical)

Module 16: Essential Digital Skills

Mapped to NOS 60 Hours (Version No. 1)

Key Learning Outcomes:

- Describe the role of digital technology in today's life
- Demonstrate how to operate digital devices and use the associated applications and features, safely and securely
- Discuss the significance of displaying responsible online behaviour while browsing, using various social media platforms, e-mails, etc., safely and securely
- Create sample word documents, excel sheets and presentations using basic features
- utilize virtual collaboration tools to work effectively

Duration: 10 Hours (4 Theory+ 6 Practical)

Module 17: Entrepreneurship

Mapped to NOS 60 Hours (Version No. 1)

Key Learning Outcomes:

- Explain the types of entrepreneurship and enterprises
- Discuss how to identify opportunities for potential business, sources of funding and



associated financial and legal risks with its mitigation plan

- Describe the 4Ps of Marketing-Product, Price, Place and Promotion and apply them as per requirement
- Create a sample business plan, for the selected business opportunity

Duration: 7 Hours (3 Theory+ 4 Practical)

Module 18: Customer Service

Mapped to NOS 60 Hours (Version No. 1)

Key Learning Outcomes:

- Describe the significance of analysing different types and needs of customers
- Explain the significance of identifying customer needs and responding to them in a professional manner.
- Discuss the significance of maintaining hygiene and dressing appropriately

Duration: 5 Hours (2 Theory+ 3 Practical)

Module 19: Getting Ready for Apprenticeship and Jobs

Mapped to NOS 60 Hours (Version No. 1)

Key Learning Outcomes:

- Create a professional Curriculum Vitae (CV)
- Use various offline and online job search sources such as employment exchanges, recruitment agencies, and job portals respectively
- Discuss the significance of maintaining hygiene and confidence during an interview
- Perform a mock interview
- List the steps for searching and registering for apprenticeship opportunities

Duration: 8 Hours (3 Theory+ 5 Practical)

Annexure

Trainer Requirements

Trainer Prerequisites						
Minimum Educational Qualification	Specialization	Relevant Industry Experience		Training Experience		Remarks
		Years	Specialization	Years	Specialization	
Minimum 10th Standard.	Preferred Diploma in Computer Science/Technology	Minimum 2 years' experience as a biometric data entry operator.		1 year preferred	Minimum 2 years' experience in the business process management domain	<p>Certification in relevant data entry software competencies: MS Office, Adobe Acrobat.</p> <p>Desirable and not mandatory: Power PDF and other OCR software.</p> <p>Training in customer orientation, dealing with difficult customers, written communication, etc.</p>

Trainer Certification	
Domain Certification	Platform Certification
Minimum accepted score in SSC Assessment is 80% per NOS being taught in "SSC/Q2213, V 2.0"	<p>Recommended that the trainer is certified for the Job role "Trainer" mapped to the Qualification Pack "MEP/Q2601".</p> <p>Minimum accepted score is 80% aggregate</p>



Assessor Requirements

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

Assessor Certification	
Domain Certification	Platform Certification
Not Applicable	

Assessment Strategy

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

Assessment System Overview

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

Assessment Criteria

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

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

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

Assessment Quality Assurance framework

NASSCOM provides two assessment frameworks NAC and NAC-Tech.

NAC (NASSCOM Assessment of Competence)

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

NAC-Tech

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

Methods of Validation

To pass a QF, a trainee should score a minimum aggregate of 50% across qualification. In case of unsuccessful completion, the trainee may seek reassessment on the Qualification Pack

Method of assessment documentation and access

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

References

Glossary

Term	Description
Key Learning Outcome	Key learning outcome is the statement of what 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).
Training Outcome	Training outcome is a statement of what a learner will know, understand and be able to do upon the completion of the training .
Terminal Outcome	Terminal outcome is a statement of what a learner will know, understand and be able to do upon the completion of a module . A set of terminal outcomes help to achieve the training outcome.
National Occupational Standard	National Occupational Standard specify the standard of performance an individual must achieve when carrying out a function in the workplace
Persons With Disability	Persons with Disability are those who have long-term physical, mental, intellectual, or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others.
Integrated Development Environment	An integrated development environment is a software application that provides comprehensive facilities to computer programmers for software development.



Acronyms and Abbreviations

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