

QUALIFICATION FILE

Field Technician Networking and Data Storage

- ☒ Short Term Training (STT) ☐ Long Term Training (LTT) ☐ Apprenticeship
- ☐ Upskilling ☐ Dual/Flexi Qualification ☐ For ToT ☐ For ToA
- ☒ General ☐ Multi-skill (MS) ☐ Cross Sectoral (CS) ☐ Future Skills ☐ OEM

NCrF/NSQF Level: 4

Submitted By:

Electronics Sector Skills Council of India (ESSCI)

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Table of Contents

Section 1: Basic Details	3
Section 2: Module Summary	5
NOS/s of Qualifications	5
Mandatory NOS/s:	5
Elective NOS/s:	5
Optional NOS/s:	6
Assessment - Minimum Qualifying Percentage	6
Section 3: Training Related	6
Section 4: Assessment Related	7
Section 5: Evidence of the need for the Qualification	7
Section 6: Annexure & Supporting Documents Check List	8
Annexure: Evidence of Level	9
Annexure: Tools and Equipment (Lab Set-Up).....	11
Annexure: Industry Validations Summary	12
Annexure: Training Details.....	14
Annexure: Detailed Assessment Criteria	16
Annexure: Assessment Strategy	23
Annexure: Acronym and Glossary	25

Section 1: Basic Details

	Qualification Name	Field Technician Networking and Data Storage																
1.	Sector/s	Electronics																
2.	Type of Qualification: ☐ New ☒ Revised ☐ Has Electives/Options ☐ OEM	NQR Code & version of existing/previous qualification: (change to previous, once 2022/EHW/ESSC/06646 & V 3	Qualification Name of existing/previous version: Field Technician Networking and Storage															
3.	a. OEM Name b. Qualification Name (Wherever applicable)	NA																
4.	National Qualification Register (NQR) Code & Version (Will be issued after NSQC approval)	QG-04-EH-044962025-V2-ESSCI	5. NCrF/NSQF Level: 4															
6.	Award (Certificate/Diploma/Advance Diploma/ Any Other (Wherever applicable specify multiple entry/exits also & provide details in annexure)	Certificate																
7.	Brief Description of the Qualification	Field Technician-Networking and Data Storage provides after sale support services to customers, typically, at their premises and is responsible for attending to customer complaints, installing newly purchased products, troubleshooting system problems and configuring peripherals such as printers, scanners and network devices.																
8.	Eligibility Criteria for Entry for Student/Trainee/Learner/Employee	a. Entry Qualification & Relevant Experience: <table border="1"> <thead> <tr> <th>S. No.</th> <th>Academic/Skill Qualification (with Specialization - if applicable)</th> <th>Required Experience (with Specialization - if applicable)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>12th grade or equivalent</td> <td>NA</td> </tr> <tr> <td>2</td> <td>10th grade or equivalent</td> <td>3 years relevant experience</td> </tr> <tr> <td>3</td> <td>Certificate-NSQF (Level-3 in relevant domain)</td> <td>3 years of relevant experience</td> </tr> <tr> <td colspan="3"># Relevant Experience in Consumer Electronics & IT Hardware</td> </tr> </tbody> </table> b. Age: NA		S. No.	Academic/Skill Qualification (with Specialization - if applicable)	Required Experience (with Specialization - if applicable)	1	12th grade or equivalent	NA	2	10th grade or equivalent	3 years relevant experience	3	Certificate-NSQF (Level-3 in relevant domain)	3 years of relevant experience	# Relevant Experience in Consumer Electronics & IT Hardware		
S. No.	Academic/Skill Qualification (with Specialization - if applicable)	Required Experience (with Specialization - if applicable)																
1	12th grade or equivalent	NA																
2	10th grade or equivalent	3 years relevant experience																
3	Certificate-NSQF (Level-3 in relevant domain)	3 years of relevant experience																
# Relevant Experience in Consumer Electronics & IT Hardware																		
9.	Credits Assigned to this Qualification, Subject to Assessment (as per National Credit Framework (NCrF))	16	10. Common Cost Norm Category (I/II/III) (wherever applicable): I															

11.	Any Licensing requirements for Undertaking Training on This Qualification <i>(wherever applicable)</i>	NA																						
12.	Training Duration by Modes of Training Delivery <i>(Specify Total Duration as per selected training delivery modes and as per requirement of the qualification)</i>	☐ Offline ☐ Online ☒ Blended <table border="1"> <thead> <tr> <th>Training Delivery Modes</th> <th>Theory (Hours)</th> <th>Practical (Hours)</th> <th>OJT Mandatory (Hours)</th> <th>OJT Recommended (Hours)</th> <th>Total (Hours)</th> </tr> </thead> <tbody> <tr> <td>Classroom (offline)</td> <td>00:00</td> <td>180:00</td> <td>120:00</td> <td>00:00</td> <td>480</td> </tr> <tr> <td>Online</td> <td>180:00</td> <td>00:00</td> <td>00:00</td> <td>00:00</td> <td></td> </tr> </tbody> </table> <i>(Refer Blended Learning Annexure for details)</i>					Training Delivery Modes	Theory (Hours)	Practical (Hours)	OJT Mandatory (Hours)	OJT Recommended (Hours)	Total (Hours)	Classroom (offline)	00:00	180:00	120:00	00:00	480	Online	180:00	00:00	00:00	00:00	
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Classroom (offline)	00:00	180:00	120:00	00:00	480																			
Online	180:00	00:00	00:00	00:00																				
13.	Aligned to NCO/ISCO Code/s <i>(if no code is available mention the same)</i>	NCO-2015/7422.2101																						
14.	Progression path after attaining the qualification <i>(Please show Professional and Academic progression)</i>	Sr. Technician – IT Hardware																						
15.	Other Indian languages in which the Qualification & Model Curriculum are being submitted	Hindi																						
16.	Is similar Qualification(s) available on NQR-if yes, justification for this qualification	☐ Yes ☒ No URLs of similar Qualifications:																						
17.	Is the Job Role Amenable to Persons with Disability	☐ Yes ☒ No If "Yes", specify applicable type of Disability:																						
18.	How Participation of Women will be Encouraged	No gender sensitization																						
19.	Are Greening/ Environment Sustainability Aspects Covered <i>(Specify the NOS/Module which covers it)</i>	☒ Yes ☐ No (Employability Skills (60 hours)																						
20.	Is Qualification Suitable to be Offered in Schools/Colleges	Schools ☐ Yes ☒ No Colleges ☒ Yes ☐ No																						
21.	Name and Contact Details of Submitting / Awarding Body SPOC <i>(In case of CS or MS, provide details of both Lead AB & Supporting ABs)</i>	Name: Saleem Ahmed Email: ceo@essc-india.org Contact No.: 011 – 8447738501 Website: https://www.essc-india.org/																						

22. Final Approval Date by NSQC: 07.10.2025	23. Validity Duration: 3 Years	24. Next Review Date: 07.10.2028
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Section 2: Module Summary

NOS/s of Qualifications

(In exceptional cases these could be described as components)

Mandatory NOS/s:

Specify the training duration and assessment criteria at NOS/ Module level. For further details refer curriculum document.

Th.-Theory **Pr.**-Practical **OJT**-On the Job **Man.**-Mandatory Training **Rec.**-Recommended **Proj.**-Project

S. No	NOS/Module Name	NOS/Module Code & Version (if applicable)	Core/ Non-Core	NCrF/NSQF Level	Credits as per NCrF	Training Duration (Hours)					Assessment Marks					
						Th.	Pr.	OJT-Man.	OJT-Rec.	Total	Th.	Pr.	Proj.	Viva	Total	Weightage (%) (if applicable)
1	Engaging with the Customers	ELE/N4601 & V4.0	Core	4	4.5	45	60	30	0	135	40	50	0	10	100	30
2	Installing, Configuring and setting up the networking and storage system	ELE/N4612 & V3.0	Core	4	5.5	45	60	60	0	165	40	50	0	10	100	25
3	Troubleshooting and fix equipment	ELE/N4613 & V3.0	Core	4	5	60	60	30	0	150	40	50	0	10	100	25
4	Employability Skills (30 hours)	DGT/VSQ/N0101 & V1.0	Non-core	4	1	30	0	0	0	30	20	30	0	0	50	20
Duration (in Hours) / Total Marks					16	180	180	120	0	480	140	180	0	30	350	100

Elective NOS/s:

S. No	NOS/Module Name	NOS/Module Code & Version (if applicable)	Core/ Non-Core	NCrF/NSQF Level	Credits as per NCrF	Training Duration (Hours)					Assessment Marks					
						Th.	Pr.	OJT-Man.	OJT-Rec.	Total	Th.	Pr.	Proj.	Viva	Total	Weightage (%) (if applicable)
1.																

S. No	NOS/Module Name	NOS/Module Code & Version (if applicable)	Core/ Non-Core	NCrF/NSQF Level	Credits as per NCrF	Training Duration (Hours)					Assessment Marks					
						Th.	Pr.	OJT-Man.	OJT-Rec.	Total	Th.	Pr.	Proj.	Viva	Total	Weightage (%) (if applicable)
2.																
Duration (in Hours) / Total Marks																

Optional NOS/s:

S. No	NOS/Module Name	NOS/Module Code & Version (if applicable)	Core/ Non-Core	NCrF/NSQF Level	Credits as per NCrF	Training Duration (Hours)					Assessment Marks					
						Th.	Pr.	OJT-Man.	OJT-Rec.	Total	Th.	Pr.	Proj.	Viva	Total	Weightage (%) (if applicable)
1.																
2.																
Duration (in Hours) / Total Marks																

Assessment - Minimum Qualifying Percentage

Please specify **any one** of the following:

Minimum Pass Percentage – Aggregate at qualification level: 70 % (Every Trainee should score specified minimum aggregate passing percentage at qualification level to successfully clear the assessment.)

Minimum Pass Percentage – NOS/Module-wise: ____% (Every Trainee should score specified minimum passing percentage in each mandatory and selected elective NOS/Module to successfully clear the assessment.)

Section 3: Training Related

1.	Trainer's Qualification and experience in the relevant sector (in years) (as per NCVET guidelines)	Diploma/ ITI (Electronics/Electrical/Mechanical) with 1 years industrial and 1 year training experience in the field Networking and Storage. Or Certified in relevant CITS Trade
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2.	Master Trainer's Qualification and experience in the relevant sector (in years) (as per NCVET guidelines)	Diploma/ ITI (Electronics/Electrical/Mechanical) with 2 years industrial and 1 year training experience in the field Networking and Storage. Or Certified in relevant CITS Trade
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

Section 4: Assessment Related

1.	Assessor's Qualification and experience in relevant sector (in years) (as per NCVET guidelines)	Diploma/ ITI (Electronics/Electrical/Mechanical) with 2 years industrial and 1 year training experience in the field Networking and Storage. Or Certified in relevant CITS Trade
2.	Proctor's Qualification and experience in relevant sector (in years) (as per NCVET guidelines)	Diploma/ ITI (Electronics/Electrical/Mechanical) with 3 years industrial and 2 year training experience in the field Networking and Storage. Or Certified in relevant CITS Trade
3.	Lead Assessor's/Proctor's Qualification and experience in relevant sector (in years) (as per NCVET guidelines)	Diploma/ ITI (Electronics/Electrical/Mechanical) with 4 years industrial and 3 year training experience in the field Networking and Storage. Or Certified in relevant CITS Trade
4.	Assessment Mode (Specify the assessment mode)	Blended
5.	Tools and Equipment Required for Assessment	☒ Same as for training ☐ Yes ☐ No (details to be provided in Annexure-if it is different for Assessment)

Section 5: Evidence of the need for the Qualification

Provide Annexure/Supporting documents name.

1.	Latest Skill Gap Study (not older than 2 years) (Yes/No): Yes
2.	Latest Market Research Reports or any other source (not older than 2 years) (Yes/No): Yes
3.	Government /Industry initiatives/ requirement (Yes/No): Yes
4.	Number of Industry validation provided: 28
5.	Estimated nos. of persons to be trained and employed: 10000
6.	Evidence of Concurrence/Consultation with Line Ministry/State Departments: Yes In processIf “No”, why:

Section 6: Annexure & Supporting Documents Check List

Specify Annexure Name / Supporting document file name

1.	Annexure: NCrf/NSQF level justification based on NCrf level/NSQF descriptors <i>(Mandatory)</i>	<i>Attached</i>
2.	Annexure: List of tools and equipment relevant for qualification <i>(Mandatory, except in case of online course)</i>	<i>Attached</i>
3.	Annexure: Detailed Assessment Criteria <i>(Mandatory)</i>	<i>Attached</i>
4.	Annexure: Assessment Strategy <i>(Mandatory)</i>	<i>Attached</i>
5.	Annexure: Blended Learning <i>(Mandatory, in case selected Mode of delivery is “Blended Learning”)</i>	<i>Filled</i>
6.	Annexure: Multiple Entry-Exit Details <i>(Mandatory, in case qualification has multiple Entry-Exit)</i>	<i>Filled</i>
7.	Annexure: Acronym and Glossary <i>(Optional)</i>	<i>Attached</i>
8.	Supporting Document: Model Curriculum <i>(Mandatory – Public view)</i>	<i>Attached</i>
9.	Supporting Document: Career Progression <i>(Mandatory - Public view)</i>	<i>Attached</i>
10.	Supporting Document: Occupational Map <i>(Mandatory)</i>	<i>Attached</i>
11.	Supporting Document: Assessment SOP <i>(Mandatory)</i>	

12.	Any other document you wish to submit:	
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Annexure: Evidence of Level

NCrF/NSQF Level Descriptors	Key requirements of the job role/ outcome of the qualification	How the job role/ outcomes relate to the NCrF/NSQF level descriptor	NCrF/NSQF Level
Professional Theoretical Knowledge/Process	Demands a wide range of specialized technical skill, clarity of knowledge and practice in a broad range of activity involving standard and non-standard practices. • Interact with the customer prior to visit • Interpret customer's requirements to suggest possible solutions • Install system network, storage system and set up the software • Complete the installation task • Educate the customer about system usage • Interpret customer complaint • Diagnose the problem • Replace the faulty module • Apprise the customer after repair/replacement • Plan the work as per the job allocation • Prepare all necessary record	A Field Technician-Networking and Data Storage also known as service technician provides after sale support services to customers, typically, at their premises and is responsible for attending to customer complaints, installing newly purchased products, troubleshooting system problems and, configuring hardware equipment such as servers, storage and other related networking devices. Hence Level 4	4
Professional and Technical Skills/ Expertise/ Professional Knowledge	Factual and theoretical knowledge in broad contexts within a field of work or study. • Knowledge of various tools and equipment used in installation, diagnosis, repair and maintenance of networks and storage system • Know the basic types of network and storage devices and their configured	A Field Technician-Networking and Data Storage should know the basics of electricity and electronics along with the installation methods. He/She should know principles of how the network functions, how to dismantle and assemble devices and use diagnostic tools and different types of defects. Hence Level 4	4

	• Perform fault diagnosis to fix faulty components		
Employment Readiness & Entrepreneurship Skills & Mind-set/Professional Skill	A range of cognitive and practical skills required to generate solutions to specific problems in a field of work or study. • Identify the work requirement to schedule timely completion accordingly • Apply the knowledge about the methods of installing, repairing and maintaining network devices and storage systems • Perform diagnosis of faults and repair the components accordingly Carry-on preventive maintenance to at regular time intervals to avoid faults • Complete the documentation	A Field Technician-Networking and Data Storage should be able to use basic tools and equipment in the correct way to install, repair and maintain network devices and storage systems. He works after getting work requirements from supervisor or work schedule. Hence Level 4	4
Broad Learning Outcomes/Core Skill	Needs proficiency in: • Communicating in clear, crisp and respectful language • Understanding workplace related documentation, guidelines, policies and procedures • Complying with organizational and professional code of ethics and standards of practice	Accountable for own work and learning in the domain of installing and maintaining of network devices. Hence Level 4	4
Responsibility	Responsibility of completing the work assigned and reporting the same as per standards. • Understand the job role and follow the organizational policy	A Field Technician-Networking and Data Storage is responsible to record and report the work done. The technician is also responsible to understand and follow the work standards and policies. Hence Level 4	4

	- Record and report about the work status - Follow safety regulations at work place - Work along with colleagues and supervisors		
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Annexure: Tools and Equipment (Lab Set-Up)

List of Tools and Equipment

Batch Size: 30

S. No.	Tool / Equipment Name	Quantity for specified	Specifications
1	Cable	50	in meter, Hybrid Class room allowed
2	Crimping Tool	6	
3	Desktop	6	Processor Above Intel Pentium 3
4	Digital Multimeter	6	Standard
5	Scanner	3	Standard
6	Wi - fi	1	Standard
7	Lan Tester	6	Standard
8	Laptop	4	Processor Above Intel Pentium 3
9	Multi-Function Laser Printer	2	Standard
10	Network Switch	6	Standard
11	Post Cards	6	Standard
12	Router	6	Standard
13	Screw Driver Set	6	Standard
14	Soldering Iron	6	Temperature Controlled
15	ESD Gloves	6	Standard
16	Insulation Tape	6	Standard
17	Lead Solder	6	Standard boxes
18	Soldering Flux	6	Standard boxes

Classroom Aids

The aids required to conduct sessions in the classroom are:

1. Whiteboard
2. Projector

3. Computer/Laptop
4. Chairs
5. Tables
6. Whiteboard marker

Annexure: Industry Validations Summary

Provide the summary information of all the industry validations in table. This is not required for OEM qualifications.

S. No	Organization Name	Representative Name	Designation	Contact Address	Contact Phone No	E-mail ID	LinkedIn Profile (if available)
1	Access Edutech Pvt. Ltd.	Sanjay Kumar Mishra	Director	96, Vrindavan Nagar Ayodhya Bypass Road Bhopal	7000650224	sanjaymishra@accesse dutech.com	
2	Artificial Intelligence Technologies	Rohit Kumar Sharma	Manager Product Development	A-21, sector 4, Block A, Kailash Colony, Greater Kailash, New Delhi	9927564461	rohit.sharma@aitunive rsal.com	
3	Bergen Associates Pvt Ltd	Soubam Sunil	Manager	305-306, Magnum House-I, Commercial Complex, Karampura, New Delhi – 110015	9311780832	s.soubam@bergengrou pindia.com	
4	Cambium Networks	Mohit Kalra	Trainer		9916993953		
5	Cisco System Pvt. Ltd	Anurag Joshi	Director		9322205060	anuragjoshi@cisco.co m	
6	Conduent- https://www.conduent.com	Prince Jain	Senior Business Analyst	7 to 9th Floor & 6 to 9th Floor, Building No.5 & 6, Plot No 20&21, Candor Tech Space, IT/ITES SEZ., Noida, Uttar Pradesh 201304	8439385780	prince.jain@conduent. com	
7	Ephicity Lifescience Analytics	Rahul Kumar Kaushik	Senior Software Engineer	2nd Main Rd, Sarvobhogam Nagar, Arekere, Bengaluru, Karnataka 560076	8859885973	Rahul.Kaushik@ephica cy.com	

8	IIE Educational Society	Barinder Singh	President		9829745313	ivyindiaprojects@gmail.com	
9	Rastriya Khushali Sansthan	Ramkaran Sinsinwar	President	VOP Tajsar Fatehpur Rajasthan	6350658040	Rkstajsar1998@gmail.com	
10	Sri Rajaram Shikshan Sansthan	Rajendra Parsad	Principle		8808696968	rajendraitijnp@gmail.com	
11	Ramyash Pvt ITI	Ramyash	Principel	Jamalpur	9454738298	Yashvantyadav964@gmail.com	
12	Nexgen Exhibitions Pvt Ltd	Saurabh Purwar	Director	1201/1206 Pragati Tower, 26 Rajendra Place, New Delhi-110008, India	9457306691	fbvidgo@gmail.com	
13	Siemens Limited	Manoj Belgaonkar	Head – Regulations, Standards and QM	R&D Centre, Thane Belapur Road, Airoli, Navi Mumbai 400708	9820682825	manoj.belgaonkar@siemens.com	
14	Tata Consultancy Services	Sheepara Kaushik	Consultant – Product Development	Kensington B Wing, Hiranandani SEZ, Powai, Mumbai 400076	8433595090	sheepara.sharma@tcs.com	
15	Evergreen Education Trust	Faizanbazaz	Director	217, Pehari Colony Jammu 180005	7006341193	eetturst@gmail.com	
16	B M Upadhyay Shiksha Samiti	K K Upadhyay	SPOC	Agra	9149158684	Kk7500081234@gmail.com	
17	Rastriya Khushali Sansthan	Ramkaran Sinsinwar	President	VOP Tajsar Fatehpur Rajasthan	6350658040	Rkstajsar1998@gmail.com	
18	Shiv shakti techniki evam samanaya shikshan sansthan	Jitendra Kumar Garg	President	B 32 Mahesh nagar jaipur rajasthan-302015	9782912782	jitendra.garg303@gmail.com	

19	Shri Solasar Balaji Shikshan	Nand Kishor Gurjar	SPOC	Rajasthan	9358734466	shribalajiitisujangarh@gmail.com	
20	YADUVANSHI PRIVATE ITI	YADVENDRA	PRINCIPAL	TC229199 - Yaduvanshi pvt iti, hasampur the- neemkathana dist-sikar rajasthan pin code no -332718	8432882688	yaduvanshicollege2008@gmail.com	
21	Sankalp Education and development society	Jafruddin Khan	SPOC		8104049522		
22	Nagravision India Pvt Ltd	Avinash Yadav	Manager System Administrator	RMZ Centennial, Tower C unit 301 and 302, Mahadevapura Post ITPL Road, Bangalore	9808326626	avinash.yadav@nagra.com	
23	Nagdeo Education Welfare Society	Vijay Nagdeo	General Manager	Ward No. 11 Junnardeo Dist. Chhindwara M.P. 480551	9425461093	Vijaynagdeo02@gmail.com	
24	Shri Prasad Sharma Shikshan Sansthan Myana	Suresh		Gautam Budha Nagar UP	8433476571		
25	Sankalp Education and development society	Jafruddin Khan	SPOC		8104049522		
26	Apollointo ways	Prakesh	CEO	B 28 Sector 65 Noida	9457306691	fbvidgo@gmail.com	
27	Shree Hari Shikshan Santhan Aaspura	Mukesh Kumar	SPOC	Rajasthan 341508	7877239952	Harikct2024@gmail.com	
28	Sri Venkateswara College of Engineering	Dr C Chandrasekhar	Head R & D & Professor in ECE	Karakmbadi Road,Tirupati 517507	9177217190	dr.chandrasekhar.c@sv colleges.edu.in	

Annexure: Training Details

Training and Employment Projections:

Year	Total Candidates	Women	People with Disability
	Estimated Training # Total	Estimated Training # Women	Estimated Training # PwD
2025-26	3000	NA	NA
2026-27	3000	NA	NA
2027-28	4000	NA	NA

Data to be provided year-wise for next 3 years

Training, Assessment, Certification, and Placement Data for previous versions of qualifications:

Qualification Version	Year	Total Candidates				Women				People with Disability			
		Trained	Assessed	Certified	Placed	Trained	Assessed	Certified	Placed	Trained	Assessed	Certified	Placed
3.0	2022-23	12275	10589	9483	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.0	2023-24	6887	5847	5255	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.0	2024-25	32513	26754	25071	NA	NA	NA	NA	NA	NA	NA	NA	NA

Applicable for revised qualifications only, data to be provided year-wise for past 3 years.

List Schemes in which the previous version of Qualification was implemented:

1. PMKVY
- 2.

Content availability for previous versions of qualifications:

☐ Participant Handbook ☐ Facilitator Guide ☐ Digital Content ☐ Qualification Handbook ☐ Any Other:

Languages in which Content is available:

Annexure: Blended Learning

Blended Learning Estimated Ratio & Recommended Tools:

Refer NCVET "Guidelines for Blended Learning for Vocational Education, Training & Skilling" available on:

<https://ncvet.gov.in/sites/default/files/Guidelines%20for%20Blended%20Learning%20for%20Vocational%20Education,%20Training%20&%20Skilling.pdf>

S. No.	Select the Components of the Qualification	List Recommended Tools – for all Selected Components	Offline : Online Ratio
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1	☒ Theory/ Lectures - Imparting theoretical and conceptual knowledge	• Books/ e-books • Presentations • Reference Material • Audio / Video Modules	30:70
2	☒ Imparting Soft Skills, Life Skills, and Employability Skills /Mentorship to Learners	• Self-Learning Videos • Broadcasts • Mobile Learning • Curated Digital content	30:70
3	☒ Showing Practical Demonstrations to the learners	• Video Content • E-Resource library • AR/ VR/ XR	30:70
4	☒ Imparting Practical Hands-on Skills/ Lab Work/ workshop/ shop floor training	• Training tools (tools list attached) • Video Play • Presentations	30:70
5	☒ Tutorials/ Assignments/ Drill/ Practice	• Online Question Bank • Mobile Quick test app • MCQ based tests	30:70
6	☒ Proctored Monitoring/ Assessment/ Evaluation/ Examinations	• Assessment engine for Essays • Up-loadable file examinations • Mock test sessions	30:70
7	☒ On the Job Training (OJT)/ Project Work Internship/ Apprenticeship Training	• Online tests • Offline assessments	30:70

Annexure: Detailed Assessment Criteria

Detailed assessment criteria for each NOS/Module are as follows:

NOS/Module Name	Assessment Criteria for Performance Criteria/Learning Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
	Introduction and Interact with the customer prior to visit	9	12	-	4

ELE/N4601: Engaging with the customers	PC1. Discuss customer concerns and provide on-site after-sales support by installing products, troubleshooting system issues, and configuring peripherals such as printers, scanners, and network devices.	2	3	-	2
	PC2. call the customer based on inputs logged into customer care to understand their problem and check with customer about time for visit, field work and confirm location	3	4	-	1
	PC3.interpret location requirement for placement of system during and after installation	4	5	-	1
	Interpret customer's requirements to suggest possible solutions	31	38		6
	PC4. enquire from the customer about the problem by asking open and close ended questions	5	5	-	1
	PC5. inform customers on whether the module has to be replaced or repaired with reasons and possible solutions	3	4	-	1
	PC6. communicate to the customers with CRM platforms, mobile support apps to resolve queries, and maintain service professionalism in real time. or inclusion under warranty and seek approval from the customer	4	5	-	1
	PC7. provide a note to the customer about the problem(s), actions taken and the cost associated and retain a copy	4	5	-	0
	PC8. provide appropriate invoice for any purchase of module or parts by customer	4	5	-	1
	PC9. apprise the customer on precautions to be taken post repairs to avoid recurrence of problem	4	5	-	1
	PC10. educate the customer about other useful products and annual maintenance contract	4	5	-	1
	PC11. seek feedback from the customers on completion of work	3	4	-	0
	NOS Total	40	50	-	10
ELE/N4612: Installing, configuring and setting up the networking and storage system	Install network, server, storage devices and set up the software	17	23	-	3
	PC1. prepare installation kit of tools and manuals as per installation manual to be carried along to the customer location	0	1	-	0
	PC2. check site conditions, open the packaging of new product and take out the hardware carefully	0	3		0
	PC3. interpret the system design requirement of customer and place the system at a location as preferred by customer	0	1	-	0
	PC4. connect all the hardware devices such as servers, storage device, networking, devices and connect battery, plug in and switch on the system"	2	3	-	0

PC5. comply with standard operating procedures for installation and zero defect handling of hardware modules such as PCB by following standard operating procedure	5	3	-	0
PC6. comply with temperature requirement and other conditions for servers	4	3	-	1
PC7. perform configuration of networking device such as router by building a configuration file	3	3		1
PC8. log and upload the configuration of networking equipment	0	3	-	1
PC9. install the appropriate application software as per server and storage requirement and the network device driver	3	3	-	0
Complete the installation task	8	12	-	2
PC10. connect the networking device, servers or storage and check system functions	1	1	-	0
PC11. perform unit and integration testing as per design requirement	2	3	-	1
PC12. perform testing of product functionality after hardware, software, operating system and peripheral integration with reference to the installation manual	2	3	-	1
PC13. measure and meet multipart calls norm against benchmark	1	1	-	0
PC14. complete the installation within agreed turn around time (TAT) to close the call in single visit	2	3	-	0
PC15. comply with the quality benchmarks of the company for task completion	0	1	-	0
Educate the customer about system usage	15	15	-	5
PC16. provide training to the customer on usage and maintenance of system hardware and software as per the recommended procedures	3	3	-	1
PC17. inform customer about warranty, other terms and conditions on the hardware devices and cost estimates of other new installations	3	3		1
PC18. provide adequate information about the hardware devices, operating procedure, maintenance and temperature control to the customer	3	3	-	1
PC19. resolve the device related queries and issues raised by the customer	3	3		1
PC20. provide all the appropriate documents including invoice to the customer	3	3		1
	40	50	-	10
Interpret customer complaint	6	12	-	2

ELE/N4613: Troubleshooting and fixing equipment	PC1.Interact with the customer respectfully, including over phone calls, to understand the issue before the visit, and maintain punctuality and professional conduct during all engagements.	1	2	-	0
	PC2.analyse the warranty, terms and conditions with relation to the product	1	2	-	1
	PC3.identify the type of problem and carry relevant tools and equipment based on customer complaint and as per standard operating procedure	1	2	-	0
	PC4.commence field trip based on type of complaint and carry troubleshooting instruction sheet	1	2	-	0
	PC5.assess whether replacement or repair of module may be required along with the turnaround time as per Service Level Agreement(SLA)	1	2		1
	PC6.carry only 100% approved and verified field replaceable parts for repairing or replacing	1	2	-	0
	Diagnose the problem	12	9	-	4
	PC7.assess the frequently encountered problems in the storage system and solution for them	2	3	-	0
	PC8.conduct root-cause analysis to identify and diagnose the likely problem/issue in networking device	2	0	-	1
	PC9.coordinate with remote technical team to diagnose and confirm the issues faced in the storage system using standard diagnostic procedure	2	3	-	1
	PC10.perform disassembling to check each part of networking, servers / storage system to isolate the failed module	2	3	-	0
	PC11.determine whether the part should be replaced or needs to be repaired	2	0	-	1
	PC12.analyse whether it can be repaired on field or at company's test centre	2	0	-	1
	Replace/Repair the faulty module	10	20	-	2
	PC13.confirm acceptance from the customer before replacing module or sending for repairs to company	1	3	-	0
	PC14.perform the steps to disassemble the system, remove and replace and re-assemble the system, if the module has to be replaced	1	4	-	1
	PC15.use manual hand soldering iron unit to solder the components or parts, if soldering needs to be done	1	4		0
	PC16.perform steps to reinstall the software or fix the issues, if there is any operating system error or software related issues	1	3	-	0

	PC17.resolve common issues in peripherals and networking devices while adhering to safety procedures and using appropriate PPE during installation, repair, or maintenance.	2	2		1
	PC18.coordinate with remote technical helpdesk to seek any assistance on field to perform diagnosis and troubleshooting	2	2		0
	PC19.escalate the problems which cannot be addressed at field level to the superior	2	2	-	0
	Apprise the customer after repair/replacement	8	8	-	1
	PC20.Perform functional testing after installing new hardware or software modules, and promptly identify and report any safety risks or equipment faults as per organizational procedures.	2	2	-	1
	PC21.complete the function within the agreed Turn Around Time (TAT) and in a single visit complying with quality standards	2	2	-	0
	PC22.report percentage of call closure in multiple visits against benchmark	2	2	-	0
	PC23.instruct customer on use of and procedures to be followed for operating the system or hardware after repair/replacement	1	1	-	0
	PC24.ask the customer to fill up a customer satisfaction feedback form for the work performed	1	1	-	0
	Complete documentation	4	1	-	1
	PC25.submit the feedback form on customer satisfaction level with respect to the product repair/replacement	1	1	-	0
	PC26.accurately report work status through proper documentation as per company's standards	1	0	-	0
	PC27.create knowledge bank on the complex repairs made through documentation	2	0	-	1
	NOS Total	40	50	-	10
DGT/VSQ/N0101 - Employability Skills (30 hours)	Introduction to Employability Skills	1	1	-	-
	PC1. understand the significance of employability skills in meeting the job requirements	-	-	-	-
	Constitutional values – Citizenship	1	1	-	-
	PC2. identify constitutional values, civic rights, duties, personal values and ethics and environmentally sustainable practices	-	-	-	-
	Becoming a Professional in the 21st Century	1	3	-	-

PC3.explain 21st Century Skills such as Self Awareness, Behavior Skills, Positive attitude, self-motivation, problem-solving, creative thinking, time management, social and cultural awareness, emotional awareness, continuous learning mindset etc.	-	-	-	-
Basic English Skills	2	3	-	-
PC4. speak with others using some basic English phrases or sentences	-	-	-	-
Communication Skills	1	1	-	-
PC5. follow good manners while communicating with others	-	-	-	-
PC6. work with others in a team			-	
Diversity & Inclusion	1	1	-	-
PC7. communicate and behave appropriately with all genders and PwD	-	-	-	-
PC8. report any issues related to sexual harassment	-	-	-	-
Financial & Legal Literacy	3	4	-	-
PC9. use various financial products and services safely and securely	-	-	-	-
PC10. calculate income, expenses, savings etc.	-	-	-	-
PC11. approach the concerned authorities for any exploitation as per legal rights and laws	-	-	-	-
Essential Digital Skills	4	6	-	-
PC12. operate digital devices and use its features and applications securely and safely	-	-	-	-
PC13. use internet and social media platforms securely and safely	-	-	-	-
Entrepreneurship	3	5	-	-
PC14. identify and assess opportunities for potential business	-	-	-	-
PC15. identify sources for arranging money and associated financial and legal challenges	-	-	-	-
Customer Service	2	2	-	-
PC16. identify different types of customers	-	-	-	-
PC17. identify customer needs and address them appropriately	-	-	-	-
PC18. follow appropriate hygiene and grooming standards	-	-	-	-

	Getting ready for apprenticeship & jobs	1	3	-	-
	PC19. create a basic biodata	-	-	-	-
	PC20. search for suitable jobs and apply	-	-	-	-
	PC21. identify and register apprenticeship opportunities as per requirement	-	-	-	-
	NOS Total	20	30	-	-
Grand Total		140	180	-	30

Annexure: Assessment Strategy

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

Mention the detailed assessment strategy in the provided template.

1. Assessment System Overview:
 - Batches assigned to the assessment agencies for conducting the assessment on SDMS/SIP or email
 - Assessment agencies send the assessment confirmation to VTP/TC looping SSC
 - Assessment agency deploys the ToA certified Assessor for executing the assessment
 - SSC monitors the assessment process & records
2. Testing Environment:
 - Confirm that the centre is available at the same address as mentioned on SDMS or SIP
 - Check the duration of the training.
 - Check the Assessment Start and End time to be as 10 a.m. and 5 p.m.
 - 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.
 - Check the mode of assessment—Online (TAB/Computer) or Offline (OMR/PP).
 - Confirm the number of TABs on the ground are correct to execute the Assessment smoothly.
 - Check the availability of the Lab Equipment for the particular Job Role.
3. Assessment Quality Assurance levels / Framework:
 - Question papers created by the Subject Matter Experts (SME)
 - Question papers created by the SME verified by the other subject Matter Experts
 - Questions are mapped with NOS and PC
 - Question papers are prepared considering that level 1 to 3 are for the unskilled & semi-skilled individuals, and level 4 and above are for the skilled, supervisor & higher management
 - Assessor must be ToA certified & trainer must be ToT Certified
 - Assessment agency must follow the assessment guidelines to conduct the assessment
4. Types of evidence or evidence-gathering protocol:
 - Time-stamped & geotagged reporting of the assessor from assessment location
 - Centre photographs with signboards and scheme specific branding
 - Biometric or manual attendance sheet (stamped by TP) of the trainees during the training period
 - Time-stamped & geotagged assessment (Theory + Viva + Practical) photographs & videos
5. Method of verification or validation:
 - Surprise visit to the assessment location

- Random audit of the batch
- Random audit of any candidate
- 6. Method for assessment documentation, archiving, and access
 - Hard copies of the documents are stored
 - Soft copies of the documents & photographs of the assessment are uploaded / accessed from Cloud Storage
 - Soft copies of the documents & photographs of the assessment are stored in the Hard Drives

On the Job:

Each module (which covers the job profile of Field Technician Networking and Data Storage) will be assessed separately.

1. The candidate must score 50% in each module to successfully complete the OJT.
2. Tools of Assessment that will be used for assessing whether the candidate is having desired skills and etiquette of dealing with customers, understanding needs & requirements, assessing the customer and perform Soft Skills effectively:
 - Videos of Trainees during OJT
 - Answer Sheets of Question Banks
 - Assessing the Log Book entries of Trainees at Employer location
 - Employer Performance Feedback.
3. Assessment of each Module will ensure that the candidate is able to:
 - Understand the basic principles of AC, DC and electronic circuits.
 - Work effectively at the workplace
 - Basic health and safety practice.

Annexure: Acronym and Glossary**Acronym**

Acronym	Description
AA	Assessment Agency
AB	Awarding Body
ISCO	International Standard Classification of Occupations
NCO	National Classification of Occupations
NCrF	National Credit Framework
NOS	National Occupational Standard(s)
NQR	National Qualification Register
NSQF	National Skills Qualifications Framework
OJT	On the Job Training

Glossary

Term	Description
National Occupational Standards (NOS)	NOS define the measurable performance outcomes required from an individual engaged in a particular task. They list down what an individual performing that task should know and also do.
Qualification	A formal outcome of an assessment and validation process which is obtained when a competent body determines that an individual has achieved learning outcomes to given standards.
Qualification File	A Qualification File is a template designed to capture necessary information of a Qualification from the perspective of NSQF compliance. The Qualification File will be normally submitted by the awarding body for the qualification.
Sector	A grouping of professional activities on the basis of their main economic function, product, service or technology.
Long Term Training	Long-term skilling means any vocational training program undertaken for a year and above. https://ncvet.gov.in/sites/default/files/NCVET.pdf