

QUALIFICATION FILE

CCTV Installation Technician

☒ 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)

155, 2nd Floor, ESC House

Okhla Industrial Area - Phase 3,

New Delhi – 110020

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Section 1: Basic Details

1.	Qualification Name	CCTV Installation Technician																			
2.	Sector/s	Electronics																			
3.	Type of Qualification: ☐ New ☒ Revised ☐ Has Electives/Options ☐ OEM	NQR Code & version of existing/previous qualification: (change to previous, once approved)- 2022/EHW/ESSC/05114 & V3.0	Qualification Name of existing/previous version: CCTV Installation Technician																		
4.	a. OEM Name b. Qualification Name (Wherever applicable)	NA																			
5.	National Qualification Register (NQR) Code & Version (Will be issued after NSQC approval)	QG-04-EH-03967-2025-V4-ESSCI	6. NCrF/NSQF Level: 4																		
7.	Award (Certificate/Diploma/Advance Diploma/ Any Other (Wherever applicable specify multiple entry/exits also & provide details in annexure)	Certificate																			
8.	Brief Description of the Qualification	The individual at work is responsible for installing the CCTV system in the customer premises. The individual understands the customer and site requirement, installs the camera and integrates the hardware for effective CCTV surveillance system functioning																			
9.	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>Diploma after 10th (Electronics /Electrical/ Mechanical)</td> <td>No experience required</td> </tr> <tr> <td>2</td> <td>12th grade or Equivalent</td> <td>No experience required</td> </tr> <tr> <td>3</td> <td>10th</td> <td>2 years NTC/NAC or 3 years relevant experience.</td> </tr> <tr> <td>4</td> <td>Certificate-NSQF (Level-3.5 in relevant domain).</td> <td>1.5 Years of relevant Experience.</td> </tr> <tr> <td colspan="3"># Relevant experience in security and surveillances.</td> </tr> </tbody> </table> b. Age: NA		S. No.	Academic/Skill Qualification (with Specialization - if applicable)	Required Experience (with Specialization - if applicable)	1	Diploma after 10 th (Electronics /Electrical/ Mechanical)	No experience required	2	12 th grade or Equivalent	No experience required	3	10 th	2 years NTC/NAC or 3 years relevant experience.	4	Certificate-NSQF (Level-3.5 in relevant domain).	1.5 Years of relevant Experience.	# Relevant experience in security and surveillances.		
S. No.	Academic/Skill Qualification (with Specialization - if applicable)	Required Experience (with Specialization - if applicable)																			
1	Diploma after 10 th (Electronics /Electrical/ Mechanical)	No experience required																			
2	12 th grade or Equivalent	No experience required																			
3	10 th	2 years NTC/NAC or 3 years relevant experience.																			
4	Certificate-NSQF (Level-3.5 in relevant domain).	1.5 Years of relevant Experience.																			
# Relevant experience in security and surveillances.																					
10.	Credits Assigned to this Qualification, Subject to Assessment (as per National Credit Framework (NCrF))	16	11. Common Cost Norm Category (I/II/III) (wherever applicable): I																		
12.	Any Licensing requirements for Undertaking Training on This Qualification (wherever applicable)	NA																			

13. Training Duration by Modes of Training Delivery (Specify Total Duration as per selected training delivery modes and as per requirement of the qualification)	☐ Offline ☐ Online ☒ Blended					
	Training Delivery Modes	Theory (Hours)	Practical (Hours)	OJT Mandatory (Hours)	OJT Recommended (Hours)	Total (Hours)
	Classroom (offline)	00:00	180:00	150:00	00:00	480:00
	Online	150:00	00:00	00:00	00:00	
(Refer Blended Learning Annexure for details)						
14. Aligned to NCO/ISCO Code/s (if no code is available mention the same)	NCO-2015/7411.0102					
15. Progression path after attaining the qualification (Please show Professional and Academic progression)	Service Engineer – CCTV Installation					
16. Other Indian languages in which the Qualification & Model Curriculum are being submitted	Hindi					
17. Is similar Qualification(s) available on NQR-if yes, justification for this qualification	☐ Yes ☒ No URLs of similar Qualifications:					
18. Is the Job Role Amenable to Persons with Disability	☐ Yes ☒ No If “Yes”, specify applicable type of Disability:					
19. How Participation of Women will be Encouraged	No gender sensitization					
20. Are Greening/ Environment Sustainability Aspects Covered (Specify the NOS/Module which covers it)	☒ Yes ☐ No Employability Skills (DGT/VSQ/N0101)					
21. Is Qualification Suitable to be Offered in Schools/Colleges	Schools ☐ Yes ☒ No Colleges ☒ Yes ☐ No					
22. Name and Contact Details of Submitting / Awarding Body SPOC (In case of CS or MS, provide details of both Lead AB & Supporting ABs)	Name: Saleem Ahmed Email: ceo@essc-india.org Contact No.: 011 – 8447738501 Website: https://www.essc-india.org/					
23. Final Approval Date by NSQC: 07.05.2025	24. Validity Duration: 3 Years				25. Next Review Date: 30.04.2028	

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 to the 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.	Site Survey and Requirement Analysis	ELE/N3182 & V1.0	Core	4	5	30	70	50	00	150	40	60	-	-	100	20
2.	Deploying of monitoring system	ELE/N3183 & V1.0	Core	4	3	30	30	30	00	90	40	60	-	-	100	25
3.	Setting up a surveillance system	ELE/N3184 & V1.0	Core	4	5	30	50	70	00	150	40	60	-	-	100	25
4.	Policies related to Data privacy and security	ELE/N3185 & V1.0	Core	4	2	30	30	00	00	60	40	60	-	-	100	20
5.	Employability Skills (30 hours)	DGT/VSQ/N0101 & V1.0	Non-core	2	1	30	00	00	00	30	20	30	-	-	50	10
Duration (in Hours) / Total Marks					16	150	180	150	00	480	180	270	-	-	450	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.																
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/Degree in Mechanical/Electrical/Electronics with 1 years of experience in Electronic Designing and preferably 1 years as Trainer in the field of CCTV Installation. Or Certified in relevant CITS Trade
2.	Master Trainer's Qualification and experience in the relevant sector (in years) (as per NCVET guidelines)	Diploma/ ITI/Degree in Mechanical/Electrical/Electronics with 2 years of experience in Electronic Designing and preferably 1 years as Trainer in the field of CCTV Installation. 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/Degree in Mechanical/Electrical/Electronics with 2 years of experience in Electronic Designing and preferably 1 years as Trainer in the field of CCTV Installation Or Certified in relevant CITS Trade
2.	Proctor's Qualification and experience in relevant sector (in years) (as per NCVET guidelines)	Diploma/ITI/Degree in Mechanical/Electrical/Electronics with 3 years of experience in Electronic Designing and preferably 1 years as Trainer in the field of CCTV Installation 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/Degree in Mechanical/Electrical/Electronics with 3 years of experience in Electronic Designing and preferably 1 years as Trainer in the field of CCTV Installation 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: 25
5.	Estimated nos. of persons to be trained and employed: 20000
6.	Evidence of Concurrence/Consultation with Line Ministry/State Departments: Yes If "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 (Mandatory)	Attached
2.	Annexure: List of tools and equipment relevant for qualification (Mandatory, except in case of online course)	Attached
3.	Annexure: Detailed Assessment Criteria (Mandatory)	Attached
4.	Annexure: Assessment Strategy (Mandatory)	Attached
5.	Annexure: Blended Learning (Mandatory, in case selected Mode of delivery is "Blended Learning")	Filled
6.	Annexure: Multiple Entry-Exit Details (Mandatory, in case qualification has multiple Entry-Exit)	Filled
7.	Annexure: Acronym and Glossary (Optional)	Attached
8.	Supporting Document: Model Curriculum (Mandatory – Public view)	Attached
9.	Supporting Document: Career Progression (Mandatory - Public view)	Attached
10.	Supporting Document: Occupational Map (Mandatory)	Attached
11.	Supporting Document: Assessment SOP (Mandatory)	
12.	Any other document you wish to submit:	

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. • Perform the repairing processes. • Follow all guidelines and instructions. • Adhere to industry work practices to achieve productivity and quality standards. Check the working of the appliances.	CCTV Installation Technician is responsible for installing the appliances and finding the faults and repairing the same of the various appliances as per instructions and standard operating procedures	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 materials, repairing processes,	CCTV Installation Technician should know the different processes involved in finding the faults and repairing of	4

	working of various home appliances. • Know the instructions and guidelines to achieve productivity and quality standards	various home appliances, their working and the guidelines to achieve productivity and quality standards. Hence Level 4	
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. • Communicate with customer, team and supervisor to understand the work requirement • Identify the errors in orders • Maintain inventory • Complete the documentation of maintenance and service records	CCTV Installation Technician should be able to use basic tools in the correct way to repair the faults in the appliances. He/she works after getting work requirements from supervisor or other team members. Hence Level 4	4
Broad Learning Outcomes/Core Skill	• Assembly procedures • Working of various home appliances • Guidelines and instructions for repairing	CCTV Installation Technician needs to know the repairing procedures, working of various home appliances. The technician should keep the workplace clean and managed 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 • Record and report about the work status • Follow safety regulations at work place Work along with colleagues and supervisors	CCTV Installation Technician should record the issues and report about the same to supervisor and also update the status of the work as per organizations policy. Hence Level 4	4

Annexure: Tools and Equipment (Lab Set-Up)

List of Tools and Equipment

S. No.	Tool / Equipment Name	Specifications	Quantity for specified Batch size
1	8-port switch	Nos	6
2	Allen Key Set	Nos	6
3	Cable	Nos	50
4	Cable	Nos	50
5	Cable	Nos	50
6	CCTV Camera	Nos	6
7	CCTV Camera	Nos	6
8	CCTV Camera	Nos	6
9	CCTV Camera	Nos	3

<Ratified in 43rd NSQC Meeting & Dated: 08/05/2025>

10	CCTV Camera	Nos	6
11	Connectors	Nos	30
12	Crimping Tool	Nos	6
13	DC Connector	Nos	30
14	Digital Multimeter	Nos	3
15	Digital Video Recorder	Nos	3
16	Drill bit Set	Nos	3
17	Electrical Drill	Nos	3
18	Electrician Plier	Nos	6
19	Hammer	Nos	6
20	Harddisk	Nos	3
21	Insulation Tape	Nos	6
22	LAN Tester	Nos	3
23	LCD Monitor	Nos	3
24	Line Tester	Nos	6
25	Nose Pliers	Nos	6
26	Paper cutter/knife	Nos	6
27	PC	Nos	3
28	Safety Gloves	Pair	6
29	Safety Helmet	Nos	6
30	Safety Shoes	Pair	6
31	Screw Driver Set	Nos	6
32	Wire Cutter	Nos	6
33	Wire Stripper	Nos	6

Batch Size: 30**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	Nagdeo Education Welfare Society	Vijay Nagdeo	General Manager	Ward No. 11 Junnardeo Dist. Chhindwara M.P. 480551	9425461093	Vijaynagdeo02@gmail.com	
2	Access Edutech Pvt. Ltd.	Sanjay Kumar Mishra	Director	96, Vrindavan Nagar Ayodhya Bypass Road Bhopal	7000650224	sanjaymishra@accessedutech.com	
3	SHIV SHAKTI TECKNIKI EVAM SAMANAYA SHIKSHAN SANSTHAN	Jitendra Kumar Garg	President	B 32 MAHESH NAGAR JAIPUR RAJASTHAN-302015	9782912782	jitendra.garg303@gmail.com	
4	YADUVANSHI PRIVATE ITI	YADVENDRA	PRINCIPAL	TC229199 - YADUVANSHI PVT ITI, HASAMPUR The- NEEMKATHANA DIST-SIKAR RAJASTHAN PIN CODE NO -332718	8432882688	yaduvanshicollege2008@gmail.com	
5	Balaji Private ITI	Rakesh Kumar	PRINCIPAL	Moonpur Mundawar Alwar Rajasthan	9829745313	rakeshiti@gamil.com	
6	EdgeFX Technologies Pvt. Ltd	Tarun Agarwal	COO	105, Liberty Plaza, Himayatnagar Hedrabad Telangana 500029		info@edgefxkits.in	
7	Cisco System Pvt. Ltd	Anurag Joshi	Director		9322205060	anuragjoshi@cisco.com	
8	Globus Infocom Limited	Sheetanshu Sinha	Sr. Resources		9711559158	sheetanshu@globusinfocom.com	
9	Rastriya Khushali Sansthan	Ramkaran Sinsinwar	President	VOP Tajsar Fatehpur Rajasthan	6350658040	Rkstajsar1998@gmail.com	
10	ApexIIT (OPC) Private Limited	Amit	Director	461, Phase V, Udyog Vihar Gurgaon 122016 Haryana India	9784868951	info@apex.com	

<Ratified in 43rd NSQC Meeting & Dated: 08/05/2025>

11	Honeywell	Lakshay Kaushik	Sales Manager	5 th floor sector 43 block c phase 1 gurgaon 122002	9910900560		
12	Manav Shiksha			Vill+Post – OIE, Dis. Mathura	7500000637		
13	Annur Industrial Training Institute	Shridevikr	Director		9489675146	skill@gmail.com	
14	Involute Automation Pvt. Ltd	Vijaya Chandra	Operation a In Charge	Plot No. 12 Tecgnocrats Industrial Estate Balanaga, Hyderabad, Telangna 500037 india		Vijaya.chandra@involutetraining.in	
15	Jnana Ganga Vidya Pith	Jagdish Parsad Yadav	Manager		9448467800	jagdishprasadyadav@gmail.com	
16	Apollo Infoways Pvt	Ravi	Director	Lh 1402 Ghaziabad	9911430044	ravi@apolloinfoways.in	
17	Apex Institute	Anil Sharma	Proprietor		7737589125	Apexisd97@gmail.com	
18	Varujh Infotech Pvt. Ltd	Gaurav Prakash	M.D.	Kanpur Uttar Pradesh	8886634504	Skill.akyone@gmail.com	
19	Vedh Narayan Singh Sheva Sansthan	Manoj Kumar	Director	Dholpur Rajasthan	9216692269	Msharmadholpur1@gmail.com	
20	Vedham Academy Madurai	Sundar Rajan	Admin	Tamilnadu	9787551862		
21	Prama Hikvision India Pvt. Ltd	Krishna Dubey	Head	2 floor siddhivinayak arcade Mumbai 400101 India	8219097146	Krishna.dubey@pramahikvision.com	
22	Cambium Networks	Mohit Kalra	Trainer		9916993953		
23	Apollointo ways	Prakesh	CEO	B 28 Sector 65 Noida	9457306691	fbvidgo@gmail.com	
24	All Zone Communication		Director	TA 324 New Delhi 110009	98101113578	allzonecommunication@gmail.com	

25	AP Securitas Pvt. Ltd	Col A K Singh	AVP	Plot No. 140 Phase 4 Udyog Vihar Gurgaon 122001	8800591268		
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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	5000	NA	NA
2026-27	5000	NA	NA
2027-28	10000	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	13175	11442	9932	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.0	2023-24	6732	5688	5169	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.0	2024-25	32857	25456	23920	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:

1. English
2. Hindi

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
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
ELE/N3182:Site Survey and Requirement Analysis	<i>Interacting with customer</i>	5	8	-	-
	PC1. greet the customer and listen to their requirements	1	3		
	PC2. understand the basic requirement of the customer	1	2		
	PC3. understand the basic layout of site where the CCTV system is to be installed from the customer	1	1		
	PC4. check with customer about time for visit, field work and confirm location	1	1		
	PC5. follow etiquette when interacting with customers as per company policy	1	1		
	<i>Understanding customer's requirements</i>	3	6	-	-
	PC6. interact with the customer to understand the purpose of CCTV installation	1	2		
	PC7. understand the system monitoring requirement including combination of viewing, recording and replay	1	2		
	PC8. understand the type of camera preferred by customer such as fixed camera, pan/tilt, zoom options, day/night camera	1	2		
	<i>Understanding the site condition</i>	6	12	-	-
	PC9. visit the site and understand the layout	1	2		
	PC10. seek customers approval for visiting the rooms in the premises	1	2		
	PC11. understand the area and other measurement specifications	1	2		
	PC12. identify the locations where the CCTV camera to be installed which could capture maximum area in the video coverage	1	2		
	PC13. decide if any mounting structure or pole is required for camera installing	1	2		
	PC14. understand the building structure for cabling purpose	1	2		
	<i>Suggesting solutions</i>	6	12		
	PC15. interact with customer to inform the observation made from surveillance aspect after the site check	1	2		
	PC16. suggest the CCTV systems that could fulfill customers and site requirement	1	2		
	PC17. suggest the type of camera and recording system to be installed	1	2		
	PC18. suggest the hardware / software requirements if it has to be connected with IP network or for remote monitoring	1	2		
	PC19. suggest the hardware system that suits the customer budget and meets the functional requirement	1	2		
	PC20. assess any hesitation from customer on selection of system and provide an alternative solution	1	2		
	<i>Deciding the CCTV system to be installed</i>	12	14	-	-
	PC21. confirm the number and type of camera to be installed as per the site requirement	2	2		
	PC22. take confirmation on mounting points of camera in the site	2	2		
	PC23. confirm the location of system placement (recorder and monitoring)	2	2		
	PC24. confirm the monitor or hardware requirement (TV / PC) and whether it is	2	2		

	available				
	PC25. confirm the type of transmission to output device: IP network or Digital Video Recorder (DVR) or remote and confirm hardware requirements	2	2		
	PC26. estimate the time for installation process and inform the customer	1	2		
	PC27. inform the customer about hardware details including cost and take sign off	1	2		
	Achieving productivity and quality standards	8	8	-	-
	PC28. ask open and close-ended questions to understand the customer requirement and expectation about the CCTV system	2	2		
	PC29. educate about different systems and equipment's available to meet customer requirements	2	2		
	PC30. achieve customer satisfaction on engagement behavior such as listening to complaints or appropriate dressing	2	2		
	PC31. educate customers about the different type of CCTV systems available in the market and suggest an ideal system for the site	2	2		
	Total Marks	40	60	-	-
ELE/N3183: Deploying of monitoring system	Procuring CCTV hardware	4	4	-	-
	PC1. procure the hardware required for CCTV system installation	1	1		
	PC2. ensure that all the hardware matches the customer requirement, agreed features and specifications	1	1		
	PC3. understand the warranty associated with the hardware product	1	1		
	PC4. understand the related documents for the hardware equipment's	1	1		
	Testing hardware before installation	4	6	-	-
	PC5. check the hardware equipment's before taking to the installation site	1	2		
	PC6. replace the hardware if any issue or malfunction is found while testing	1	2		
	PC7. check for critical equipment such as camera, recorder with respect to quality and output	1	1		
	PC8. ensure all the tools, equipment's, utilities are available in good condition to enable installing in single visit	1	1		
	Connecting cables	5	7	-	-
	PC9. lay the cables in the building or site to connect the camera and system	1	1		
	PC10. ensure adequate length of co-axial and other cables are available for installation	1	1		
	PC11. use BNC connectors for joining cables and crimp them	1	1		
	PC12. use power cable of specified thickness to connect CCTV system with power supply	1	1		
	PC13. connect all the cables from multiple cameras to the CCTV system area	1	3		
	Setting up the camera	8	13	-	-
	PC14. mount the CCTV camera so as to cover maximum area	1	2		

	PC15. decide whether the camera requires any enclosure to protect from dust, vandalism and climatic conditions	1	2		
	PC16. use stable mounting structure and ensure that is not disturbed by wind or rain	1	2		
	PC17. decide on the height of camera installation according to the end purpose	1	2		
	PC18. set up the type of camera such as pan, tilt, zoom unit as per customer requirement	1	2		
	PC19. set camera controls	2	2		
	PC20. connect the power and video output cable to the camera	1	1		
	Using tools and equipment's	6	8	-	-
	PC21. use tools such as diagonal cutters, screwdrivers, crimp tools, knife for cabling and camera mounting	1	1		
	PC22. follow standard operating procedure of tools and equipment's and avoid any hazard	1	1		
	PC23. follow the installation manual for specific hardware product	1	1		
	PC24. use recommended tools for specific equipment to avoid damage	1	2		
	PC25. follow standard safety procedures while installing	1	2		
	PC26. ensure that only quality hardware products are procured	1	1		
	Complying to industry and quality standards	10	16	-	-
	PC27. ensure product installation and user manual is available which should be given to the customer	1	1		
	PC28. ensure that there are no cable joins, sharp bends during cabling	1	1		
	PC29. ensure weather proof (UV proof) cable are used in outdoors	1	1		
	PC30. ensure that cabling is sturdy, protected and does not disturb the ambience of building	1	2		
	PC31. ensure that cameras are protected from light while installing in outdoor	1	2		
	PC32. ensure the intended area is covered during movement in case of tilt or pan type of camera	1	2		
	PC33. assess power requirement of camera and use required power supply and cable	1	1		
	PC34. educate customer on use of cameras for desired monitoring and warranty period and annual maintenance requirement	1	2		
	PC35. ensure zero-material damage while handling the equipment during installation process	1	2		
	PC36. install target number of CCTVs as per company's policy	1	2		
	Prepare for installation	3	6	-	-
	PC37. identify and comply with the applicable provisions of legislative and organizational requirements relevant to installing CCTV equipment and audio systems	1	2		
	PC38. obtain, review and confirm assignment instructions with relevant persons as required	1	2		
	PC39. identify and control potential and existing risks and hazards in the work area in accordance with OHS requirements and own role, competence and authority	1	2		
	Total Marks	40	60	-	-
	Installing CCTV and audio systems	7	10	-	-

ELE/N3184: Setting up a surveillance system	PC1. select and use the personal protection equipment in accordance with Occupational Health and Safety (OHS) requirements	1	3		
	PC2. accurately position the CCTV equipment and audio system in accordance with installation specifications and assignment instructions	1	1		
	PC3. securely fix the CCTV equipment and audio system and connect to cabling using appropriate methods and procedures	1	1		
	PC4. ensure that CCTV equipment and audio system is installed without damage or distortion to the surrounding environment or services	1	1		
	PC5. ensure that safe workplace practices are applied throughout installation process in accordance with OHS requirements.	1	1		
	PC6. identify changing circumstances and factors affecting the achievement of assignment instructions	1	2		
	PC7. get the recommendations for changes to installation plans, if any, approved by relevant persons	1	1		
	Connecting CCTV camera and DVR with the system	6	1	-	-
	PC8. connect all the cameras installed to the DVR	1	1		
	PC9. ensure that all cameras are connected to the DVR and the wiring is appropriate	1			
	PC10. connect the monitor (TV / PC) with the video output connection in the DVR	1			
	PC11. connect speakers, if required, for audio output to DVR	1			
	PC12. connect the camera optional controls (tilt / pan / zoom) to DVR	1			
	PC13. use DVR link option to connect with other DVR in the network	1			
	PC14. connect the DVR to router, if required, to enable remote monitoring				
	Setting up CCTV system	4	6	-	-
	PC15. connect the power supply of DVR, monitor, speakers to set up the system	1	1		
	PC16. install the appropriate software for IP network or remote monitoring	1	1		
	PC17. enter the appropriate IP address to receive the video signals through IP network / internet	1	1		
	PC18. connect all equipment's and switch on to start the video capture	1	3		
	Complete installation	5	8	-	-
	PC19. inspect and check the installed CCTV equipment and audio system to confirm operational effectiveness	1	1		
	PC20. conduct checks to confirm that all terminations are electrically and mechanically sound	1	1		
	PC21. restore the work area to original condition, dispose of waste and clean and store tools and equipment in accordance with organizational requirements	1	1		
	PC22. document any malfunctions, faults, wear or damage to tools or equipment, if any, and report for repair or replacement in accordance with organizational procedures	1	2		
	PC23. notify about completion of work to the customer in accordance with organizational procedures	1	3		
	Checking functioning of CCTV system	7	10	-	-
	PC24. perform a demo of CCTV system operation with the customer	1	1		

	PC25. ensure that all the controls in the system are properly working	1	1		
	PC26. ensure that pan, tilt, zoom options of the camera are working	1	1		
	PC27. monitor and switch to multiple camera installed and connected in the system	1	1		
	PC28. perform viewing, recording and replaying the video captured in the system as per customer requirement	1	1		
	PC29. take corrective action and fix the issues such as no video, lack of clarity in the system when found	1	1		
	PC30. perform remote monitoring and controls associated if it is opted by customer	1	4		
	Interacting with customer	2	4	-	-
	PC31. inform customer on adequate information about hardware device or software	1	2		
	PC32. instruct customer on use of and procedures to be followed for operating the system or hardware	1	2		
	Reporting to superior	3	8	-	-
	PC33. receive the work order from the superior	1	1		
	PC34. report on the work load and completion status	1	1		
	PC35. escalate the problems that cannot be resolved at field level with reason	1	1		
	PC36. submit the feedback form on customer satisfaction level with respect to the installation		4		
	PC37. accurately report work status through proper documentation as per company's standards		1		
	Achieving productivity and quality standards	6	6	-	-
	PC38. ensure that there is no problem after installing the CCTV system and the output video is per customers expectation	1	1		
	PC39. confirm acceptance on installing any hardware or software in the system	1	1		
	PC40. inform customer about warranty and other terms and conditions on the hardware equipment	1	1		
	PC41. provide relevant documents to customers on completion of installation	1	1		
	PC42. achieve 100% satisfaction with customer on installation service	1	1		
	PC43. achieve 100% on time completion of field installation with reference to agreed target and time or reasons for not meeting target	1	1		
	Total Marks	40	60	-	-
ELE/N3185: Policies related to Data privacy and security	Adherence to Data Privacy Regulations	9	12	-	-
	PC1: Ensure compliance with applicable data privacy laws and regulations (e.g., GDPR, HIPAA, or local laws) during the installation and configuration of CCTV systems.	3	4		
	PC2: Maintain confidentiality of customer data, including footage, access credentials, and network configurations.	3	4		
	PC3: Obtain customer consent before accessing or handling sensitive data during installation or maintenance tasks.	3	4		
	Secure Installation Practices	9	12	-	-
	PC4: Install CCTV systems using secure methods to prevent unauthorized physical access to devices.	3	4		

	PC5: Configure devices with strong, unique passwords and ensure default credentials are changed.	3	4		
	PC6: Use encryption protocols to secure data transmission between CCTV cameras and storage devices.	3	4		
	Data Storage and Retention	6	12	-	-
	PC7: Configure data storage systems to comply with customer-defined retention policies while ensuring data security.	2	4		
	PC8: Implement access control measures for stored data, limiting access to authorized personnel only.	2	4		
	PC9: Safeguard recorded footage against unauthorized deletion, tampering, or theft.	2	4		
	Incident Response and Reporting	4	6	-	-
	PC10: Identify and report any potential breaches or vulnerabilities in the CCTV system to the relevant authority.	2	3		
	PC11: Respond promptly to security incidents, minimizing risks to customer data.	2	3		
	Customer Education and Support	4	6	-	-
	PC12: Educate customers on the importance of data privacy and security measures, including password management and access controls.	2	3		
	PC13: Provide guidance on maintaining compliance with privacy policies and securing their CCTV system.	2	3		
	Ethical Handling of Data	4	6	-	-
	PC14: Refrain from accessing or sharing CCTV footage without explicit customer authorization.	2	3		
	PC15: Ensure ethical practices in handling and transferring sensitive customer information.	2	3		
	Documentation and Record-Keeping	4	6	-	-
	PC16: Maintain accurate records of installations, configurations, and data privacy measures implemented.	2	3		
	PC17: Document customer consents, data access logs, and system security measures for auditing purposes.	2	3		
	Total Marks	40	60	-	-
DGT/VSQ/N0101 - Employability Skills (30 hours)	Introduction to Employability Skills	1	1	-	-
	PC1. identify employability skills required for jobs in various industries	-	-	-	-
	PC2. identify and explore learning and employability portals	-	-	-	-
	Constitutional values – Citizenship	1	1	-	-
	PC3. recognize the significance of constitutional values, including civic rights and duties, citizenship, responsibility towards society etc. and personal values and ethics such as honesty, integrity, caring and respecting others, etc.	-	-	-	-
	PC4. follow environmentally sustainable practices	-	-	-	-
	Becoming a Professional in the 21st Century	2	4	-	-
	PC5. recognize the significance of 21st Century Skills for employment				

		-	-	-	-
	PC6. practice the 21st Century Skills such as Self- Awareness, Behaviour Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn for continuous learning etc. in personal and professional life	-	-	-	-
	<i>Basic English Skills</i>	2	3	-	-
	PC7. use basic English for everyday conversation in different contexts, in person and over the telephone	-	-	-	-
	PC8. read and understand routine information, notes, instructions, mails, letters etc. written in English	-	-	-	-
	PC9. write short messages, notes, letters, e-mails etc. in English	-	-	-	-
	<i>Career Development & Goal Setting</i>	1	2	-	-
	PC10. understand the difference between job and career	-	-	-	-
	PC11. prepare a career development plan with short- and long-term goals, based on aptitude	-	-	-	-
	<i>Communication Skills</i>	2	2	-	-
	PC12. follow verbal and non-verbal communication etiquette and active listening techniques in various settings	-	-	-	-
	PC13. work collaboratively with others in a team	-	-	-	-
	<i>Diversity & Inclusion</i>	1	2	-	-
	PC14. communicate and behave appropriately with all genders and PwD	-	-	-	-
	PC15. escalate any issues related to sexual harassment at workplace according to POSH Act	-	-	-	-
	<i>Financial and Legal Literacy</i>	2	3	-	-
	PC16. select financial institutions, products and services as per requirement	-	-	-	-
	PC17. carry out offline and online financial transactions, safely and securely	-	-	-	-
	PC18. identify common components of salary and compute income, expenses, taxes, investments etc	-	-	-	-
	PC19. identify relevant rights and laws and use legal aids to fight against legal exploitation	-	-	-	-
	<i>Essential Digital Skills</i>	3	4	-	-
	PC20. operate digital devices and carry out basic internet operations securely and safely	-	-	-	-
	PC21. use e- mail and social media platforms and virtual collaboration tools to work effectively	-	-	-	-
	PC22. use basic features of word processor, spreadsheets, and presentations	-	-	-	-

	<i>Entrepreneurship</i>	2	3	-	-
	PC23. identify different types of Entrepreneurship and Enterprises and assess opportunities for potential business through research	-	-	-	-
	PC24. develop a business plan and a work model, considering the 4Ps of Marketing Product, Price, Place and Promotion	-	-	-	-
	PC25. identify sources of funding, anticipate, and mitigate any financial/ legal hurdles for the potential business opportunity	-	-	-	-
	<i>Customer Service</i>	1	2	-	-
	PC26. identify different types of customers	-	-	-	-
	PC27. identify and respond to customer requests and needs in a professional manner.	-	-	-	-
	PC28. follow appropriate hygiene and grooming standards	-	-	-	-
	<i>Getting ready for apprenticeship & Jobs</i>	2	3	-	-
	PC29. create a professional Curriculum vitae (Résumé)	-	-	-	-
	PC30. search for suitable jobs using reliable offline and online sources such as Employment exchange, recruitment agencies, newspapers etc. and job portals, respectively	-	-	-	-
	PC31. apply to identified job openings using offline/online methods as per requirement	-	-	-	-
	PC32. answer questions politely, with clarity and confidence, during recruitment and selection	-	-	-	-
	PC33. identify apprenticeship opportunities and register for it as per guidelines and requirements	-	-	-	-
	Total Marks	20	30	-	-
Grand Total		180	270	-	-

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

<Ratified in 43rd NSQC Meeting & Dated: 08/05/2025>

- 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:

1. Each module (which covers the job profile of CCTV Installation Technician) will be assessed separately.
2. The candidate must score 50% in each module to successfully complete the OJT.
3. 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 performing 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.
4. Assessment of each Module will ensure that the candidate is able to:
 - Understand the requirements of the customers
 - Understand the process of installing the CCTV camera
 - 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 defines 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