



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

Tel: 011 – 8447738501

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	8
Annexure: Tools and Equipment (Lab Set-Up)	9
Annexure: Industry Validations Summary	11
Annexure: Training Details	11
Annexure: Detailed Assessment Criteria	13
Annexure: Assessment Strategy	21
Annexure: Acronym and Glossary	23

Section 1: Basic Details

1.	Qualification Name	CCTV Installation Technician																
2.	Sector/s	Electronics																
3.	Type of Qualification: <input type="checkbox"/> New <input checked="" type="checkbox"/> Revised <input type="checkbox"/> Has Electives/Options <input type="checkbox"/> OEM	NQR Code & version of existing/previous qualification: <i>(change to previous, once approved)</i> - 2022/EHW/ESSC/05114 & V3.0	Qualification Name of existing/previous version: CCTV Installation Technician															
4.	a. OEM Name b. Qualification Name <i>(Wherever applicable)</i>	NA																
5.	National Qualification Register (NQR) Code & Version <i>(Will be issued after NSQC approval)</i>	QG-04-EH-03967-2025-V4-ESSCI	6. NCrF/NSQF Level: 4															
7.	Award (Certificate/Diploma/Advance Diploma/ Any Other) <i>(Wherever applicable specify multiple entry/exits also & provide details in annexure)</i>	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" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 5%;">S. No.</th> <th style="width: 65%;">Academic/Skill Qualification (with Specialization - if applicable)</th> <th style="width: 30%;">Required Experience (with Specialization - if applicable)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>3 year 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> </tbody> </table> # Relevant experience in security and surveillances. b. Age: 18 years		S. No.	Academic/Skill Qualification (with Specialization - if applicable)	Required Experience (with Specialization - if applicable)	1	3 year diploma after 10 th (Electronics/Electrical/Mechanical)	No experience required	2	12 th grade or Equivalent	No experience required	3	10th	2 years NTC/NAC or 3 years relevant experience.	4	Certificate-NSQF (Level-3.5 in relevant domain).	1.5 Years of relevant Experience.
S. No.	Academic/Skill Qualification (with Specialization - if applicable)	Required Experience (with Specialization - if applicable)																
1	3 year diploma after 10 th (Electronics/Electrical/Mechanical)	No experience required																
2	12 th grade or Equivalent	No experience required																
3	10th	2 years NTC/NAC or 3 years relevant experience.																
4	Certificate-NSQF (Level-3.5 in relevant domain).	1.5 Years of relevant Experience.																
10	Credits Assigned to this Qualification, Subject to Assessment <i>(as per National Credit Framework (NCrF))</i>	16	11. Common Cost Norm Category (I/II/III) <i>(wherever applicable): I</i>															
12	Any Licensing requirements for Undertaking Training on This Qualification <i>(wherever applicable)</i>	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)	<input type="checkbox"/> Offline <input type="checkbox"/> Online <input checked="" type="checkbox"/> 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 Codels (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	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No URLs of similar Qualifications:					
18	Is the Job Role Amenable to Persons with Disability	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Employability Skills (DGT/VSQ/N0101)					
21	Is Qualification Suitable to be Offered in Schools/Colleges	Schools <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Colleges <input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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: 01.05.2025	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 <i>(if applicable)</i>	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 (%) <i>(if applicable)</i>
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 <i>(if applicable)</i>	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 (%) <i>(if applicable)</i>
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
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	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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	<input checked="" type="checkbox"/> Same as for training <input type="checkbox"/> Yes <input type="checkbox"/> 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: 5
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	<p>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.</p> <ul style="list-style-type: none"> • Perform the repairing processes. • Follow all guidelines and instructions. • Adhere to industry work practices to achieve productivity and quality standards. <p>Check the working of the appliances.</p>	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	<p>Factual and theoretical knowledge in broad contexts within a field of work or study.</p> <ul style="list-style-type: none"> • 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
Batch Size: 30

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
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

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	70006 50224	sanjaymishra@accessedutech.com	
2	Nagdeo Education Welfare Society	Vijay Nagdeo	President	Ward No. 11 Junnardeo dist. Chhindwara M.P. 480551	94254 61093	Vijaynagdeo2@gmail.com	
3	Nexgen	Saurabh Purwar	Director	1201/1206 Pragati Tower, 26 Rajendra Place New Delhi 110008		fbvideo@gmail.com	
4	SHIV SHAKTI TECKNIKI EVAM SAMANAYA SHIKSHAN SANSTHAN	Jitendra Kumar Garg	President	B 32 Mahesh nagar jaipur rajasthan-302015	97829 12782	jitendra.garg303@gmail.com	
5	Yaduvanshi private iti	Yadvendra	Principal	TC229199 - Yaduvanshi pvt iti,hasampur the-neemkathana dist-sikar rajasthan pin code no - 332718	84328 82688	yaduvanshicollege2008@gmail.com	

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:

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

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
3.0	2023-24	6732	5688	5169		NA	NA	NA	NA	NA	NA	NA	NA
3.0	2024-25	32857	25456	23920		NA	NA	NA	NA	NA	NA	NA	NA

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	<input checked="" type="checkbox"/> Theory/ Lectures - Imparting theoretical and conceptual knowledge	<ul style="list-style-type: none">● Books/ e-books● Presentations● Reference Material● Audio / Video Modules	30:70
2	<input checked="" type="checkbox"/> Imparting Soft Skills, Life Skills, and Employability Skills /Mentorship to Learners	<ul style="list-style-type: none">● Self-Learning Videos● Broadcasts● Mobile Learning● Curated Digital content	30:70
3	<input checked="" type="checkbox"/> Showing Practical Demonstrations to the learners	<ul style="list-style-type: none">● Video Content● E-Resource library● AR/ VR/ XR	30:70
4	<input checked="" type="checkbox"/> Imparting Practical Hands-on Skills/ Lab Work/ workshop/ shop floor training	<ul style="list-style-type: none">● Training tools (tools list attached)● Video Play● Presentations	30:70
5	<input checked="" type="checkbox"/> Tutorials/ Assignments/ Drill/ Practice	<ul style="list-style-type: none">● Online Question Bank● Mobile Quick test app● MCQ based tests	30:70
6	<input checked="" type="checkbox"/> Proctored Monitoring/ Assessment/ Evaluation/ Examinations	<ul style="list-style-type: none">● Assessment engine for Essays● Up-loadable file examinations	30:70

		● Mock test sessions	
7	<input checked="" type="checkbox"/> On the Job Training (OJT)/ Project Work Internship/ Apprenticeship Training	● Online tests ● Offline assessments	30:70

Detailed assessment criteria for each NOS/Module are as follows

[Annexure: Detailed Assessment Criteria](#)

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

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

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

PC15. decide whether the camera requires any enclosure to protect from dust, vandalism and climatic conditions				
PC16. use stable mounting structure and ensure that is not disturbed by wind or rain				
PC17. decide on the height of camera installation according to the end purpose				
PC18. set up the type of camera such as pan, tilt, zoom unit as per customer requirement				
PC19. set camera controls				
PC20. connect the power and video output cable to the camera				
Using tools and equipment's	6	8	-	-
PC21. use tools such as diagonal cutters, screwdrivers, crimp tools, knife for cabling and camera mounting				
PC22. follow standard operating procedure of tools and equipment's and avoid any hazard				
PC23. follow the installation manual for specific hardware product				
PC24. use recommended tools for specific equipment to avoid damage				
PC25. follow standard safety procedures while installing				
PC26. ensure that only quality hardware products are procured				
Complying to industry and quality standards	10	16	-	-
PC27. ensure product installation and user manual is available which should be given to the customer				
PC28. ensure that there are no cable joins, sharp bends during cabling				
PC29. ensure weather proof (UV proof) cable are used in outdoors				
PC30. ensure that cabling is sturdy, protected and does not disturb the ambience of building				
PC31. ensure that cameras are protected from light while installing in outdoor				
PC32. ensure the intended area is covered during movement in case of tilt or pan type of camera				
PC33. assess power requirement of camera and use required power supply and cable				
PC34. educate customer on use of cameras for desired monitoring and warranty period and annual maintenance requirement				
PC35. ensure zero-material damage while handling the equipment during installation process				
PC36. install target number of CCTVs as per company's policy				
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				
PC38. obtain, review and confirm assignment instructions with relevant persons as required				
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				
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				
	PC2. accurately position the CCTV equipment and audio system in accordance with installation specifications and assignment instructions				
	PC3. securely fix the CCTV equipment and audio system and connect to cabling using appropriate methods and procedures				
	PC4. ensure that CCTV equipment and audio system is installed without damage or distortion to the surrounding environment or services				
	PC5. ensure that safe workplace practices are applied throughout installation process in accordance with OHS requirements.				
	PC6. identify changing circumstances and factors affecting the achievement of assignment instructions				
	PC7. get the recommendations for changes to installation plans, if any, approved by relevant persons				
	Connecting CCTV camera and DVR with the system	6	8	-	-
	PC8. connect all the cameras installed to the DVR				
	PC9. ensure that all cameras are connected to the DVR and the wiring is appropriate				
	PC10. connect the monitor (TV / PC) with the video output connection in the DVR				
	PC11. connect speakers, if required, for audio output to DVR				
	PC12. connect the camera optional controls (tilt / pan / zoom) to DVR				
	PC13. use DVR link option to connect with other DVR in the network				
	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				
	PC16. install the appropriate software for IP network or remote monitoring				
	PC17. enter the appropriate IP address to receive the video signals through IP network / internet				
	PC18. connect all equipment's and switch on to start the video capture				
	Complete installation	5	8	-	-
	PC19. inspect and check the installed CCTV equipment and audio system to confirm operational effectiveness				
	PC20. conduct checks to confirm that all terminations are electrically and mechanically sound				
	PC21. restore the work area to original condition, dispose of waste and clean and store tools and equipment in accordance with organizational requirements				
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					
PC23. notify about completion of work to the customer in accordance with organizational procedures					
Checking functioning of CCTV system	7	10	-	-	
PC24. perform a demo of CCTV system operation with the customer					

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

	PC5: Configure devices with strong, unique passwords and ensure default credentials are changed.				
	PC6: Use encryption protocols to secure data transmission between CCTV cameras and storage devices.				
	Data Storage and Retention	6	12	-	-
	PC7: Configure data storage systems to comply with customer-defined retention policies while ensuring data security.				
	PC8: Implement access control measures for stored data, limiting access to authorized personnel only.				
	PC9: Safeguard recorded footage against unauthorized deletion, tampering, or theft.				
	Incident Response and Reporting	4	6	-	-
	PC10: Identify and report any potential breaches or vulnerabilities in the CCTV system to the relevant authority.				
	PC11: Respond promptly to security incidents, minimizing risks to customer data.				
	Customer Education and Support	4	6	-	-
	PC12: Educate customers on the importance of data privacy and security measures, including password management and access controls.				
	PC13: Provide guidance on maintaining compliance with privacy policies and securing their CCTV system.				
	Ethical Handling of Data	4	6	-	-
	PC14: Refrain from accessing or sharing CCTV footage without explicit customer authorization.				
	PC15: Ensure ethical practices in handling and transferring sensitive customer information.				
	Documentation and Record-Keeping	4	6	-	-
	PC16: Maintain accurate records of installations, configurations, and data privacy measures implemented.				
	PC17: Document customer consents, data access logs, and system security measures for auditing purposes.				
	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	-	-

- 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:**
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 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