

SYLLABUS
CCTV Installation Technician

Level Code: III

Course Code: EL/S/L3/C014 TL/S/L3/C031

Vertical Name: IT Hardware

Course Name: 2.3.4 CCTV Installation technician (ESSCI/TSSC)

Objective of the Course:

CCTV Installation Technician: Also called ‘CCTV Installer’, the CCTV installation Technician provides after sale support services to customers, typically, at their premises

Brief Job Description: The individual at work is responsible for installing the CCTV system in the customer premises. The individual understand the customer and site requirement, installs the camera and integrates the hardware for effective CCTV surveillance system functioning.

Personal Attributes: The job requires the individual to have: ability to build interpersonal relationships, patience, listening skills and critical thinking. The individual must be willing to travel to client premises in order to install equipment at different locations.

Learning Outcomes:

NOS # ELE/N4609- Visit site and understand customer requirement

1. Interact with the customer
2. Understand their requirements
3. Visit the site
4. Understand the site condition and requirement
5. Suggest possible solutions
6. Decide on the CCTV system to be installed
7. Achieve productivity and quality standards

ELE/N4610 Install the CCTV camera

1. Procure the hardware required for installation
2. Test the hardware before installation
3. Connect the cables
4. Install and setup the camera
5. Use appropriate tools and equipments for installation
6. Achieve productivity and quality standards

ELE/N4611 Setup the CCTV surveillance system

1. Connect CCTV camera and DVR with system
2. Set up CCTV system
3. Ensure system functioning, perform demo
4. Complete installation, report
5. Interact with customer
6. Interact with Supervisor
7. Achieve productivity and quality as per company’s norms

NOS # ELE/N9909 - Coordinate with colleagues and co-workers

1. Interact with supervisor or superior
2. Report potential areas of disruptions to work process
3. Spot process disruptions and delays
4. Coordinate with colleagues

Expected Job Roles:

CCTV Installation technician

Duration of the Course (in hours)

350 hours

Minimum Eligibility Criteria and pre-requisites, if any

10th Passed

Professional Knowledge:

NOS # ELE/N4609- Visit site and understand customer requirement

KA1. company's policies on: customer care, warranties, products

KA2. company's code of conduct

KA3. organization culture and typical customer profile

KA4. company's reporting structure

KA5. company's documentation policy

KA6. company's service level agreements and policies

KB1. CCTV camera installation requirement in terms of equipment, system, tools, applications appropriate for a particular site

KB2. preparation of field and site for camera installation

KB3. design criteria for CCTV camera installation

KB4. location criteria for CCTV camera installation

KB5. different types of CCTV equipment in the market, their specifications and prices

KB6. different types of CCTV camera and associated systems

KB7. different types of DVR and their purposes

KB8. tools and equipment to carry for installations

KB9. precautions to be taken while handling field calls and dealing with customers

KB10. relevant reference sheets, manuals and documents to carry in the field

ELE/N4610 Install the CCTV Camera

KA1. company's policies on: incentives, delivery standards, and personnel management

KA2. company's sales and after sales support policy

KA3. importance of the individual's role in the workflow

KA4. reporting structure

KA5. company's policy on product's warranty and other terms and conditions

KA6. company's line of business and product portfolio

KA7. company's customer support and service policy

KB1. basic electronics involved in the hardware

KB2. basic electrical and wiring

KB3. different types of electronic surveillance products and functionalities

KB4. functions of electrical and mechanical parts or modules

KB5. typical customer profile

KB6. elements of CCTV systems such as camera, DVR, monitor

KB7. company's portfolio of products and that of competitors

- KB8. installation procedures given in the manuals
- KB9. specification and the procedures to be followed for setting up the system
- KB10. different type of cables used for data transmission and power transmission
- KB11. power requirement of different CCTV related equipment
- KB12. video recording of footage – analog and digital
- KB13. different types of camera available in the market
- KB14. camera specifications such as focus, lens type, zoom
- KB15. controls of different options in camera such as rotation, speed of movement in pan / tilt camera
- KB16. voltage and power requirement for different hardware devices
- KB17. how to operate the system and other hardware
- KB18. safety rules, policies and procedures
- KB19. quality standards to be followed

ELE/N4611 Setup the CCTV surveillance system

- KA1. company's policies on: incentives, delivery standards, and personnel management
- KA2. company's sales and after sales support policy
- KA3. importance of the individual's role in the workflow
- KA4. reporting structure
- KA5. company's policy on product's warranty and other terms and conditions
- KA6. company's line of business and product portfolio
- KB1. different types of electronic surveillance products and functionalities
- KB2. functions of electrical and mechanical parts/ modules
- KB3. specification and the procedures to be followed for setting up the system
- KB4. different type of cables used for data transmission and power transmission
- KB5. power requirement of different CCTV related equipment
- KB6. video recording of footage – analog and digital
- KB7. different types of camera available in the market
- KB8. camera specifications such as focus, lens type, zoom
- KB9. controls of different options in camera such as rotation, speed of movement
- KB10. voltage and power requirement for different hardware devices
- KB11. integration of hardware to setup the system
- KB12. parameters and specification for different types of system integration
- KB13. accessing image from remote locations
- KB14. CCTV monitoring and control over IP network / Internet
- KB15. IP technology and networking principles
- KB16. basics of networking
- KB17. video recording technologies
- KB18. controls in digital video recorder and their usage
- KB19. how to operate the system and other hardware
- KB20. safety rules, policies and procedures
- KB21. quality standards to be followed

NOS # ELE/N9909 - Coordinate with colleagues and co-workers

- KA1. company's policies on: incentives, delivery standards, and personnel management
- KA2. importance of the individual's role in the workflow

KA3. reporting structure
 KB1. how to communicate effectively
 KB2. how to build team coordination

Entrepreneurship Professional Skill:

- xvi. Interpersonal skills
- xvii. Communication skills
- xviii. Behavioural skills
- xix. Reading, writing and computer skills
- xx. Teamwork and multitasking
- xxi. Reflective thinking
- xxii. Critical Thinking
- xxiii. Decision Making

Core Skill:

- 9. Installation and Repair Skills
- 10. Hardware and Software operation skills
- 11. Networking, Servers and storage hardware related skills
- 12. Using tools and machines

Detailed Syllabus of Course

Module.No	Module. Name	Minimum No. of Hours
	Visit site and understand customer requirement	
	Install the CCTV Camera	
	Setup the CCTV surveillance system	
	Coordinate with colleagues and co-workers	
Total Theory / Lecture Hours		150
Total Practical / Tutorial Hours		200
Total Hours		350

Recommended Hardware:

1. Different types of CCTV Camera
2. DVR, Monitor, Key board mouse & their hardware
3. Storage device
4. Diagonal cutters, screwdrivers, crimp tools, knife for cabling and camera mounting