SURVEILLANCE SOLUTION DEPARTMENT (SSD)
THREE-DAY TECHNICIAN TRAINING PROGRAM ON CCTV SURVEILLANCE SYSTEM

Program Overview & Eligibility

Target Group: ***Electricians and other Electronic Technicians***

Eligibility Criteria: Candidates should possess technician-level experience in the Electrical/Electronic field along with basic field experience in hardware and network systems.

Duration and Structure

Level	Duration	Mode	Venue
Technician Training	3 Days (21 Hours)	Classroom + Hands-on	**Surveillance Lab** C-DIT Head Office Chithranjali Hills, Thiruvallam PO, Thiruvananthapuram Contact No: -.8921354905 / 9895711301

Training Curriculum and Modules

The Technician Training Programme comprises structured modules blending rigorous theory, field safety, practical hands-on exercises, and modern installation methodologies.

Module	Topic & Duration	Theory / Hands-on Experience Sessions
Module 1	Safety Precautions and Worksite Practices (1 Hour)	• Importance of workplace safety in CCTV installation • Safe use of ladders, tools, and power equipment • Handling of electrical and network cables • Personal Protective Equipment (PPE) & field safety norms • Emergency response and first aid basics
Module 2	Basics of Electricity and Power Systems (1 Hour)	• Electrical fundamentals – current, voltage, resistance, power • AC/DC systems and power supply principles • Circuit protection – fuses, MCBs, and grounding • Understanding PoE (Power over Ethernet) • Safety precautions while handling live circuits
Module 3	Video Basics and Signal Fundamentals (2 Hours)	• Analog and digital video signals • Frame rate, resolution, and bit rate • Color systems (PAL, NTSC) and compression formats (H.264, H.265) • Bandwidth and storage calculation for CCTV recordings • Image clarity, FPS, and real-time monitoring optimization
Module 4	Introduction to CCTV Systems (2 Hours)	• CCTV system architecture and components • Camera types – Analog, IP, PTZ, Dome, Bullet, Thermal • DVR/NVR – types, storage management, and configuration • Signal transmission methods and compression formats

Module 5	System Design and Installation (3 Hours)	• Site survey and camera placement design principles • Cable selection (Coaxial, Cat6, Fiber) and termination • Power budgeting and PoE considerations • Mounting procedures and camera alignment • Field installation standards and documentation
Module 6	Network Configuration and Integration (4 Hours)	• IP addressing, subnetting, VLANs • Router and switch setup for CCTV networks • Port forwarding and remote access setup • Mobile app and cloud integration • Data privacy and cybersecurity basics
Module 7	Operation, Maintenance, and Troubleshooting (4 Hours)	• Identifying common faults in CCTV systems • NVR/DVR configuration errors and recovery • Network diagnosis tools and methods • Maintenance scheduling and preventive checks • Spare management and escalation matrix

Assessment and Certification

Candidates' technical competence will be assessed through continuous evaluation. Upon successful completion, a formal certificate of technician in surveillance systems will be issued by C-DIT

Course Fee & Logistics:

Course Fee Details

- *Course Fee: ₹4,500.00 per participant*
- *Goods & Services Tax: + 18% GST (₹810.00)*
- *Total Payable: ₹5,310.00 (inclusive of GST)*

Mode of Payment

The payment must be credited directly to the C-DIT bank account. Please find the official banking details below:

Account Name: *Registrar, Centre for Development of Imaging Technology*
Bank: *State Bank of India*
Branch: *Main Branch, Statue*
Account Number: *67312078524*
IFSC Code: *SBIN0070028*

Travel & Accommodation:

Please Note: Traveling allowances and accommodation expenses are **not covered** by the course fee. Participants are responsible for arranging and funding their own travel and lodging.

Scan the QR code below or visit the official C-DIT portal to complete your registration