



QUETTA INSTITUTE OF INFORMATION TECHNOLOGY AND ENGLISH LANGUAGE

TTB Registration No.	616/TTB/QITEL/QTA/2018
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CCTV CAMERA TECHNICIAN COURSE OUTLINE COURSE OUTLINE – 2 MONTHS

□ Module 1: Introduction to CCTV Systems

- What is CCTV (Closed Circuit Television)
- Importance of surveillance systems
- Applications in homes, offices, banks, industries
- Basic components of CCTV system

📷 Module 2: Types of CCTV Cameras

- Analog cameras
- IP cameras
- Dome cameras
- Bullet cameras
- PTZ (Pan Tilt Zoom) cameras
- Wireless cameras

🔧 Module 3: CCTV System Components

- Cameras
- DVR (Digital Video Recorder)
- NVR (Network Video Recorder)
- Hard disk storage
- Power supply units
- Cables (Coaxial, LAN Cat5/Cat6)
- Connectors (BNC, RJ45)

↪ Module 4: Tools & Equipment

- Drill machine
- Screwdriver set
- Crimping tool
- Tester (cable tester, multimeter)
- Ladder and safety tools
- Network tools

⚡ Module 5: Basic Electrical Concepts

- Voltage, current, resistance
- AC/DC power supply
- Wiring basics
- Safety precautions

🌐 Module 6: Networking Basics (Important)

- IP address concept

- LAN/WAN basics
- Router configuration
- Internet setup for CCTV
- Remote viewing via mobile apps

Module 7: Installation Techniques

- Camera mounting (wall/ceiling)
- Cable routing
- DVR/NVR setup
- Hard disk installation
- Power connection

Module 8: Software & Configuration

- DVR/NVR configuration
- Camera settings
- Mobile app setup (remote access)
- Backup & recording settings
- Playback system

Module 9: Troubleshooting & Maintenance

- No video issues
- Network connection problems
- Power failures
- Camera focus issues
- Maintenance procedures

Module 10: Practical Field Work

- Live installation practice
- Site survey techniques
- Client requirements handling
- Real project setup

Module 11: Professional Skills

- Customer dealing
- Site planning
- Estimation of cost
- Job preparation

Final Project

- Complete CCTV system installation, configuration, and troubleshooting
- DVR/ NVR + IP camera setup
- Remote mobile viewing configuration
- Field work with the best CCTV camera sellers/ installers/ professionals in the market

Final Outcome

After completing this course, you can:

- ✓ Install CCTV systems professionally
- ✓ Configure DVR/ NVR and IP cameras
- ✓ Solve technical faults
- ✓ Work in security companies or freelance