Course Title: CCTV Forensics
Duration: 18/11/2024 to 29/11/2024 (2 weeks)
Mode: Physical at NFSU, Gandhinagar

Objectives:

- To study the types of CCTV cameras, their basic structure and architecture
- To understand the effectiveness of CCTV in crime detection and prevention
- To comprehend the impact of CCTV as potential evidence in criminal offenses
- To study the standard protocols and right practices for collection, handling, preservation, and analysis of CCTV footages
- To list out the measures to be adopted to increase the efficacy of CCTV evidence.

Block Syllabus:

- An Introduction to the Video surveillance system
- Types of CCTV cameras, their applications and technical specifications
- Understanding Components of CCTV and its framework
- Role of CCTV in effective Policing
- Image sensors, their types, and working
- Communication, Networking, and storage aspects in CCTV installations
- Video management system, its components, and architecture
- Collection, Handling, and Preservation of CCTV evidence
- CCTV video processing and compression techniques
- Forensic examination and analysis of CCTV footage: Authentication, enhancement, gait pattern analysis, Photogrammetrically analysis, behavioral pattern analysis
- CCTV footage Restoration/data recovery from damaged Devices
- Importance of CCTV footage auditing
- Introduction to video analytics and its role in effective surveillance
- Facial Recognition from CCTV footage with related case studies
- AI-based CCTV monitoring and surveillance
- Introduction to Super Human Recognizers
- Report Writing for cases involving CCTV evidence
- Legal Admissibility and Evidentiary Value of CCTV evidence
- Recommendations and best practices for strengthening CCTV architecture for securing our homeland
- Hands-on training on the technologies used for authentication of CCTV/video footage
- Hands-on training on the technologies used for enhancement of the CCTV footage
- Hands-on training on various components of CCTV camera, DVR Examination
- Hands-on training on the Latest technologies used for the recovery of data from damaged devices
- Gait pattern analysis and Photogrammetrically analysis from CCTV footage
- Facial comparison from CCTV evidence
- Micro-expression analysis/Behavioral pattern analysis from CCTV footage