HIGHER NITEC IN SECURITY SYSTEM INTEGRATION (2 YEARS)

CERTIFICATION

Credits required for certification:

Sector Foundation Modules : 6
Cluster Core Modules : Specialisation Modules : 33
Internship Programme Modules : 8
Life Skills Modules : 9
Cross Disciplinary Core Modules : 6
Electives : 6
Total : 68

COURSE STRUCTURE

| Module Title | Credits |
|---|---------|
| SECTOR FOUNDATION MODULES | |
| Electrical & Cabling Technology | 3 |
| IoT Fundamentals | 3 |
| SPECIALISATION MODULES | |
| System Administration for Security System | 3 |
| Networking for Security System | 3 |
| Security Robotics | 3 |
| Intrusion Detection System | 3 |
| Access Control System | 3 |
| Smart Building Management | 3 |
| Video Surveillance System | 3 |
| Security System Integration | 3 |
| Project Management | 3 |
| Al for Security System | 3 |
| Cybersecurity for Physical System | 3 |
| INTERNSHIP PROGRAMME MODULES | |
| Internship Programme | 8 |
| ELECTIVES (GENERAL) AND LIFE SKILLS MODULES | |
| For details, click <u>here</u> | |

Note: The offer of electives is subject to the training schedule of respective ITE Colleges. Students are advised to check with their Class Advisors on the availability of the elective modules they intend to pursue.

MODULE OBJECTIVES

Sector Foundation Modules

Electrical & Cabling Technology

On completion of the module, students should be able to set up, maintain and troubleshoot cabling systems.

IoT Fundamentals

On completion of the module, students should be able to configure, establish communication and process data from IoT environmental elements such as devices, nodes, gateways and cloud.

Specialisation Modules

System Administration for Security System

On completion of the module, students should be able to set up server operating systems and perform system administration tasks, such as managing user accounts and groups. They should also be able to perform preventive maintenance and implement basic system security.

Networking for Security Systems

On completion of this module, students should be able to plan, install, configure and troubleshoot computer network system for the wired and wireless LAN environment.

Security Robotics

On completion of this module, students should be able to gain a basic understanding of how robotics system function and able to perform basic maintenance as well as operational tasks related to security robotic systems.

Intrusion Detection System

On completion of this module, students should be able to install, maintain and troubleshoot intrusion detection systems in various security environments.

Access Control System

On completion of this module, students should be able to set up and commission an access control system. They should also be able to perform preventive maintenance and troubleshoot issues in the access control system.

Smart Building Management

On completion of this module, students should be able to design and manage IoT-enabled smart building systems, integrate Al-driven security solutions in smart buildings, to optimize its efficiency and security.

Video Surveillance System

On completion of this module, students should be able to set up, maintain and troubleshoot surveillance systems.

Security System Integration

On completion of the module, students should be able to design and integrate a security system solution to meet customers' need and requirements.

Project Management

On completion of the module, students should be able to plan, execute and monitor security system project using the various project management tools and techniques to meet the project scope, schedule and cost requirements.

Al for Security Systems

On completion of the module, students should be able to apply their knowledge and skills in AI ethics and AI solution for security systems to propose and implement recommended AI features. These solutions will enable the use of advanced analytics to enhance physical security operations.

Cybersecurity for Physical System

On completion of the module, students should be able to establish awareness of good practices in cybersecurity, and understanding of cybersecurity threats and vulnerabilities, utilize technologies and tools to mitigate them. The students should also be able to configure, test and troubleshoot security solutions at host and device level.

Internship Programme Modules

Internship Programme
On completion of the module, students should be able to apply and integrate the skills and knowledge that they have acquired at ITE College and develop competencies in other areas not covered in the curriculum, at the workplace.

Electives (General) and Life Skills Modules

For details, click here.