HIGHER NITEC IN SECURITY SYSTEM INTEGRATION (3 YEARS)

CERTIFICATION

Credits required for certification:

Foundation Modules	:	24
Core Modules	:	25
Specialisation Modules	:	20
Life Skills Modules	:	10
Cross Disciplinary Core Modules	:	9
Electives	:	8
Total	:	96

COURSE STRUCTURE

Module Title	Credits
FOUNDATION MODULES	
Electrical & Cabling Technology	3
CAD & Soldering	3
Digital Electronics	3
Analogue Electronics	3
Programming Fundamentals	3
IoT Fundamentals	3
Networking & Communications Fundamentals	3
Cybersecurity Fundamentals	3
CORE MODULES	
System Administration	3
Networking for Security System	3
CAD for Security System	3
Intrusion Detection System	3
Access Control System	3
Video Surveillance Technology	3
Video Surveillance System	3
Industry Attachment 1	4
SPECIALISATION MODULES	
Security System Integration	3
Project Management	3
AI for Security System	3
Cybersecurity for Physical System	3
Industry Attachment 2	8
LIFE SKILLS MODULES	
For details, click here	

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.

Last updated on 7 Dec 2023

MODULE OBJECTIVES

Foundation Modules

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

CAD & Soldering
On completion of the module, students should be able to create and update CAD drawings, as well as build electronic prototypes.

Digital Electronics
On completion of the module, students should be able to set up and test digital electronic circuits.

Analogue Electronics
On completion of the module, students should be able to set up and test analogue electronic circuits.

Programming Fundamentals
On completion of the module, students should be able to apply programming constructs such as variables, programming syntax, sequential programming and control flow statements, in a programmable controller-based system.

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.

Networking & Communications Fundamentals
On completion of the module, students should be able to set up, configure, maintain and test computer and communication networks. They should also be able to identify the various network topologies and protocols, and troubleshoot network connectivity faults.

Cybersecurity Fundamentals
On completion of the module, students should be able to apply the knowledge and essentials skills in all security domains in the cyber world - information security, systems security, network security, mobile security, physical security, ethics and laws, related technologies, defense and mitigation techniques use in protecting.

Core Modules

System Administration
On completion of the module, students should be able to set up server operating systems and perform system administration tasks such as user management, resource management and performance monitoring. Students should also be able to configure file server services 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.

CAD for Security Systems
On completion of this module, students should be able to create, update and interpret electrical and security system installation drawings.

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 install, maintain and troubleshoot access control systems in various security environments.

Video Surveillance Technology
On completion of this module, students should be able to select, test and troubleshoot video surveillance devices.

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

Industry Attachment 1
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.

Specialisation Modules

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.

AI 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 deploy the recommended AI solutions to leverage advanced analytics for 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.

Industry Attachment 2
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.

Life Skills Modules
For details, click here.