About SIT

The Amar Nath and Shashi Khosla School of Information Technology was established in 2004, under the aegis of IIT Delhi, with an endowment from the distinguished IIT alumnus Vinod Khosla (B.Tech., EE 1976). The objective of the school is to foster interdisciplinary, goal-oriented research, innovation and post-graduate education in information technology. The school undertakes research in diverse interdisciplinary areas where there is a significant application of information technologies. It has state-of-the-art laboratories for all students and faculty members working in related areas.
The interdisciplinary M.Tech Programme in Cybersecurity is a masters program offered to students interested in advanced learning in any area of cybersecurity. The course was introduced to bridge the gap between industry needs and the required skills in the domain of cybersecurity. This program combines advanced lecture and laboratory coursework along with an 18-month M.Tech thesis project. The students also take additional elective courses that open avenues for better placements in academia and industry. The course structure has been divided into three specializations:

- System Security and Cyber Forensics
- Cryptography and Cryptanalysis
- Embedded System and Hardware Security
M.S. (by Research)

The M.S. (by Research) program is a research-oriented masters program where the credit requirements are lighter in terms of coursework and heavier in terms of research. There is no fixed course structure. Students can register for any course with permission from their supervisor.

PhD

SIT’s ~70 PhD students (completed + enrolled) address various interdisciplinary and application-oriented research topics related to computing. SIT’s PhD students are financially supported by prestigious high-value fellowships from government and industry sources such as Prime Minister’s Research Fellowship (PMRF) and Google Fellowship in addition to Institute Assistantship.
Why Hire Us?

➢ Our students are from diverse engineering backgrounds such as Computer Science, Electrical, and Electronics.
➢ They are taught by the best faculty from the Department of Computer Science and Engineering, Department of Electrical Engineering, Department of Mathematics and Department of Management Studies.
➢ Our students study core computer science courses like Advanced Data Structures, Advanced Computer Networks, Cloud Computing, and Formal Verification.
➢ Each student specialises in their area of interest with subjects like Network and System Security, Machine Learning, Biometric Security, and Computer Vision.
➢ They work on industry-related projects such as 5G Network Security, Federated Learning, Vehicular Network Security, and Machine Learning Security.
Key Courses

- Advanced Data Structures
- Machine Learning
- Artificial Intelligence
- Network and System Security
- Introduction to Blockchains, Cryptocurrencies and Smart Contracts
- Cryptography and Computer Security
- Biometric Security
- Data Privacy
- Computer Networks
- Cyber-Physical Systems
- Wireless Network
- Application Layer Security
- Digital Watermarking and Steganography
Key Courses

- Advanced Computer Networks
- Cloud Computing Technology Fundamentals
- Network Security
- Digital Forensics
- Security in Hardware Devices
- Wireless Networks
- Special Module on Intelligent Information Processing
- Special module in Cyber Security
- Special Module in Computer Forensics
- Special Module in Application Security
- Special Module in Software Systems
Lab Facilities

- Cyber Security Lab (CoE-CSIA)
- Cyber Security and Penetration Testing Lab
- Secure Hardware Bases System Design Lab
- VLSI Design and Tools Lab

- Architecture, Embedded and Energy Sensitive Computing Lab
- Mobile and Machine to Machine Lab
- Medical Application of IT and Graphic Modeling Lab
- ICTD Lab
Research Areas

- Security in Internet of Things Space (SIOTS) - Secure Execution
- Security in Connected Devices in 5G
- Game-based Interactive Simulator for Training Professionals in Cybersecurity Vulnerabilities
- Cyber Security, Cyber Systems, Information Assurance
- Hardware Security and Embedded Systems Security
- Wireless/Mobile Security
- Artificial Intelligence for Social Good
- Digital Service Design and Device Experience Management

- Social Computing, NLP
- Cryptography
- Computer Vision and Deep learning
- Security and Privacy in Using Artificial Intelligence based Methods
- Governance of Digital Services in Context of Security
- Information Risk Assessment for Digital Services
- Impacts of Security Challenges on IoT Adoption
- Computer Vision and Medical Image Analysis
- Inputs for Governance Towards Privacy Preservation
Contact Information

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