



Indian Institute of Information
Technology Sri City (IIIT Sri City)

M.Tech Cyber Security

Type

Pg Program

Mode

Online

Duration

2 Years

Total fees

₹ 271,000

Indian Institute of Information Technology Sri City (IIIT Sri City)

The Indian Institute of Information Technology Sri City, Chittoor is an Institute of National Importance established through a public-private partnership. Known for its industry-oriented curriculum, research focus and technology-driven learning, the institute prepares professionals to address emerging digital challenges. IIIT Sri City promotes innovation, entrepreneurship and interdisciplinary collaboration to develop globally competent technology leaders.

M.Tech Cyber Security

Highlights

- ◆ Earn an M.Tech degree in Cyber Security from IIIT Sri City through a flexible online learning format.
- ◆ Build practical expertise in ethical hacking, penetration testing, cryptography, cloud security and digital forensics.
- ◆ Gain hands-on exposure through security labs, attack simulations, vulnerability assessments and real-world projects.
- ◆ Explore the application of artificial intelligence, machine learning and blockchain in modern cybersecurity.
- ◆ Participate in campus immersion opportunities and gain IIIT Sri City alumni status upon successful completion.

Learning outcomes

- ◆ Apply cybersecurity principles and cryptographic techniques to protect digital systems and information.
- ◆ Identify and mitigate vulnerabilities across networks, cloud environments, operating systems and mobile platforms.
- ◆ Perform ethical hacking, penetration testing and security assessments using structured methodologies.
- ◆ Use AI and machine learning techniques to support threat detection, anomaly identification and cyber defence.
- ◆ Conduct incident response, malware analysis and digital forensic investigations across enterprise environments.

Eligibility Criteria

Applicants should have a B.Tech / BE / BS/ M.Tech / MSc (4 semester program) / MCA (4-semester program) / MS Degree (min. 4 semester) / equivalent degree in the relevant discipline with at least 55% marks or 5.5/10 CPI. In the case of the candidate belonging to SC, ST, or Persons with Disability (PwD) category, this is relaxed to 50% or equivalent 5.0 CGPA/CPI

For MCA/MSC passed graduates, the percentage score of MCA/MSC would be considered. For BE/BTech Engineering graduates without PG specialization, the percentage score of the undergraduate degree would be considered. For a post-graduation in the Engineering field of study,

PG score qualification can be considered.

GATE is not mandatory.

Selection process will be scheduled post-counseling & application process, depending on the number of eligible applications as per seat availability for the program. This entire process will be online.

Candidates who do not meet the minimum CGPA or percentage requirement, can still be considered if they provide relevant work experience in the technical field.

Semester 1 (28 subjects)

- | | |
|---|---|
| ◆ Introduction to Cyber Security | ◆ Operating Systems and Mobile Security |
| ◆ Overview | ◆ Introduction to Operating System Security |
| ◆ Security Layer | ◆ Security in Major Operating Systems |
| ◆ Data Security and Access Control | ◆ Security Goals |
| ◆ Network Security | ◆ Attacks on Operating Systems |
| ◆ Operating System Security | ◆ OWASP Mobile Security Attacks |
| ◆ Incident Response | ◆ Securing Mobile Applications |
| ◆ Number Theory | ◆ Penetration Testing |
| ◆ Fundamentals of Number Theory | ◆ Introduction to Penetration Testing |
| ◆ Number-Theoretic Functions and Theorems | ◆ Reconnaissance and Information Gathering |
| ◆ Quadratic Residues and Reciprocity | ◆ Vulnerability Assessment and Scanning |
| ◆ Primitive Roots and Advanced Topics | ◆ Exploitation Basics |
| ◆ Algebraic Structures and Finite Fields | ◆ Post-Exploitation and Reporting |
| ◆ Elliptic Curve Cryptography | ◆ Advanced Topics and Capstone Project |



Curriculum Overview (continued)

Semester II (23 subjects)

- ◆ Cryptography
- ◆ Number Theory Basics
- ◆ Shannon's Theory
- ◆ Symmetric-Key Cryptography
- ◆ Public-Key Cryptography
- ◆ Digital Signatures
- ◆ Applications
- ◆ Internet Security
- ◆ Introduction to Networking Principles
- ◆ Cybersecurity Threats and Attack Vectors
- ◆ Basic Cryptography and Symmetric-Key Encryption
- ◆ Authentication
- ◆ Authorisation and Access Control
- ◆ Network and Electronic Mail Security
- ◆ Firewalls and Types of Firewalls
- ◆ Cloud Security
- ◆ Introduction to Cloud Computing
- ◆ Virtualisation
- ◆ Cloud Computing Security
- ◆ Attacks in Cloud Computing
- ◆ Defence Techniques in Cloud
- ◆ Tools and Simulators
- ◆ Capstone Project: Securing a Real-World Application



Curriculum Overview (continued)

Semester III (23 subjects)

- ◆ Blockchain Technology and Applications
- ◆ Foundations of Blockchain and Cryptography
- ◆ Blockchain Structure and the Bitcoin Ecosystem
- ◆ Consensus Mechanisms
- ◆ Ethereum and Smart Contract Fundamentals
- ◆ Smart Contract Development and Token Standards
- ◆ Real-World Applications and Risks in Blockchain
- ◆ Fusing Machine Learning and Deep Learning with Cyber Security
- ◆ Introduction to Machine Learning in Cybersecurity
- ◆ Supervised Learning for Cybersecurity
- ◆ Unsupervised Learning and Anomaly Detection
- ◆ Deep Learning for Cybersecurity
- ◆ Practical Applications and Model Deployment
- ◆ Ethical
- ◆ Legal and Future Trends in AI-Based Cybersecurity
- ◆ System Security
- ◆ Introduction to System Security
- ◆ Active Directory Security
- ◆ Cryptography and Password Security
- ◆ Web and API Security
- ◆ Social Engineering and Phishing
- ◆ Traffic Analysis and Network Security
- ◆ Minor Project



Curriculum Overview (continued)

Semester IV (8 subjects)

- ◆ Digital Forensics
- ◆ Introduction to Digital Forensics
- ◆ Digital Evidence and Anti-Forensics
- ◆ Data Acquisition and Storage Forensics
- ◆ Mobile and Network Forensics
- ◆ Memory Forensics and Malware Analysis
- ◆ Incident Response and Practical Labs
- ◆ Major Project

Fee Structure

Fee heads	Year 1	Year 2	Total
Program Fee	₹ 132,000	₹ 132,000	₹ 264,000
Application Fee	₹ 5,000	—	₹ 5,000
Administration Fee	₹ 2,000	—	₹ 2,000
Total	₹ 139,000	₹ 132,000	₹ 271,000