



Manipal University Jaipur

Faculty of Science, Technology and Architecture (FoSTA)

Department of Information Technology

M. Tech. (Cyber Security)

(AY 2025/2026 onwards)

Program Outcomes, Program Specific Outcomes & Program Educational Objectives

Program Outcomes (POs)

- [PO 1]. An ability to independently carry out research /investigation and development work to solve practical problems.
- [PO 2]. An ability to write and present a substantial technical report/document.
- [PO 3]. Graduates should be able to conduct advanced research in specialized areas of Computer Science and Engineering through literature review, identification of research gaps, problem formulation, methodology design, result analysis and comparison of research outcomes in the form of dissertations or research work.

Program Specific Outcomes (PSOs)

- [PSO 1]. Develop an in-depth knowledge and skill sets in Cybersecurity to monitor, prepare, predict, detect, respond and prevent cyber-attacks and ensure enterprise security.
- [PSO 2]. To develop innovative solutions to complex cyber security problems by applying advanced techniques and conduct research in emerging areas of cyber security.
- [PSO 3]. To prepare trained workforce needed for academics, R&D in ICT, and associated sectors.

Program Educational Objectives (PEOs)

After completion of the program the graduating students shall be able to

- [PEO 1]. Identify, analyse, and simulate the potential security breaches of cyber and information systems.
- [PEO 2]. Optimistically exhibit the acquired information security related technical knowledge and skills to protect and defend the information resources of an organization.
- [PEO 3]. Develop, analyse, evaluate and deploy robust and secure cyber-physical systems to meet desirable constraints.
- [PEO 4]. Apply advanced problem-solving skills to analyse and address new cybersecurity concerns with novel methodologies and cutting-edge technology such as artificial intelligence, cryptography, and threat detection frameworks.
- [PEO 5]. Work competently for different sectors like academia, industry, research and development, entrepreneurship, and start-up initiator in an individual or collaborative manner utilizing interpersonal skills.