



Department of Computer Science & Engineering

Birla Institute of Technology, Mesra, Ranchi - 835215 (India)

M.Tech Information Security

Programme Educational Objectives (PEOs)

PEO1: Students are prepared to identify, analyse and solve research problems emphasizing security concerns in context of data, computer network and computational system. They are trained to develop practical and efficient solutions to the challenges in the growing field of information security.

PEO2: Students are imparted with strong base of knowledge that makes them suitable for industries, teaching and research.

PEO3: Students are trained in such a way that makes them capable of exploiting and enhancing theoretical and practical knowledge of computer science with focus on security.

PEO 4: Students are inculcated with the sensitivity towards ethics, public policies and their responsibilities towards the society.

PROGRAM OUTCOMES (POs)

PO1: An ability to independently carry out research /investigation and development work to solve practical problems.

PO2: An ability to write and present a substantial technical report/document.

PO3: Students should be able to demonstrate a degree of mastery over the area as per the specialization of the program. The mastery should be at a level higher than the requirements in the appropriate bachelor program.

PO4: An ability to apply knowledge of mathematics and advanced computing & networking technologies for solving problems.

PO5: An ability to design and conduct experiments and to analyse and interpret data related to software and hardware design solutions.

PO6: An ability to identify, formulate and solve security issues based on the fundamental understanding of concepts related to data communication and computer networks.

PROGRAM SPECIFIC OUTCOMES (PSOs)

On successfully completing the program a graduate shall

PSO1: Possess ability to analyse and resolve security issues in networks and computer systems to secure an IT infrastructure.

PSO2: Have the ability to measure the performance of security systems within an enterprise-level information system. Troubleshoot, maintain, and update an enterprise-level information security system.

PSO3: Acquire knowledge to evaluate and communicate the human role in security systems with an emphasis on ethics, social engineering vulnerabilities and training.