

**INDIRA GANDHI NATIONAL OPEN
UNIVERSITY**

School of Vocational Education and Training

Master of Science (Information Security)

Programme: Master of Science (Information Security) (MSCIS) with an exit option in as P.G Diploma in Information Security.

The broad objective of the programme is to prepare graduate students for productive courses in information security by providing an outstanding environment for teaching and research in core areas of the discipline. The programme aim is to (a) provide protection and security to personal data and to build data-oriented infrastructure in the workplace; (b) raise high professional ethics in the individuals towards providing information security; and (c) experiment and learn the skills and techniques needed for providing protection and security to our information.

Learning Outcomes

Learner should have the following learning outcomes after completion of the Master of Science (Information Science) Programme

Expected Programme Learning Outcomes (PLOs) in terms of :	<p>Knowledge: The learners should be able to demonstrate the acquisition of knowledge to:</p> <ul style="list-style-type: none"> • Define the meaning and scope of Information Security. • Demonstrate and understand the complex body of Knowledge in the specialized area of ‘Information Security’ based on own research experience from a master’s project and global research literature • Explain in-depth knowledge in the network security, cyber security, policy and standard law, business security, digital forensics, cyber-attack, cloud infrastructure cyber security and theoretical and practical insight into methods used to obtain this knowledge. • Analyze web application testing and audit e-commerce and cyberspace, IoT security, latest trends in information and cyber-security and process and they are being used for security purpose.
	<p>Skills: The learners should be able to demonstrate the acquisition of skills required to:</p> <ul style="list-style-type: none"> • Apply critical analysis and reflection to ethical research and demonstrate cognitive and technical skills in a body of knowledge or practice. • Undertake to work both independently or in groups on complex tasks that require co-operation across all information security disciplines. • Plan strategies with an outsourcing company with specialized area of information security. • Can communicate effectively by writing well-structured reports and contribution for project reports and by oral presentation • Apply relevant theory, methods, and analytic approaches within areas of information security. • Solve problems for current issue in the information security industry. • Integrate general information security with e-commerce and businesses
	<p>Application of Knowledge & Skills: The learners should be able to demonstrate the ability to:</p> <ul style="list-style-type: none"> • Calibrate learnt concepts and skills to undertake project work. • Apply knowledge and skills to prevent threats such as computer hacking, malicious code and denial –of-service attacks
	<p>Generic Learning Outcomes: The learners should be able to demonstrate the ability to:</p> <ul style="list-style-type: none"> • Gather and interpret relevant quantitative and qualitative data to identify problems • Listen, read and present the information related to the course in a concise and clear manner. • Meet one’s own learning needs related to the programme • Pursue self-paced and self-directed learning.
	<p>Constitutional, Humanistic, Ethical, and Moral Values: The learners</p>

	<p>should be able to demonstrate the willingness to:</p> <ul style="list-style-type: none">• Practice team work.• Follow ethical practices in conducting research and project work.• Imbibe values of good citizenry and justice.
	<p>Employability & Entrepreneurship skills: The learners should be able to:</p> <ul style="list-style-type: none">• Possess the knowledge and skills to ensure confidentiality and integrity of the valuable and crucial information and operational process in an organization.• Identify suitable employment opportunities in the area of Information Security like Chief Information Security officer, Information Security Analyst, Network Security Engineer, Security Architect, Cyber Security Manager, Information Security Officer, Security Software Developer, Security Consultant, Computer Forensics Analysts, Penetration Tester, IT Security Consultant, Security Systems Administrator.• Independently undertake research and development in the area of Information Security.