PROGRAM	**Master of Business Administration**
SEMESTER	**3**
COURSE TITLE	**Information Security, Ethics and Issues**
COURSE CODE	**04MB0342**
COURSE CREDITS	**03**
COURSE DURATION	**42 Hrs (42 sessions of 60 minutes each)**

COURSE OUTCOMES:

- Understand, appreciate, employ, design and implement appropriate security technologies and policies to protect computers and digital information.
- Identify & Evaluate Information Security threats and Cryptography methods
- Identify common Response and Human factors on Information Security
- Demonstrate the use of standards and cyber laws to enhance information security in the development process and infrastructure protection.
- Identify the common concepts involved in Information security and correlate the same with Industry practices.

COURSE CONTENTS:

Unit No	Unit / Sub Unit	Sessions
I	Foundations of. Cyber Security Concepts: Essential Terminologies: CIA, Risks, Breaches, Threats, Attacks, Exploits. Information Gathering (Social Engineering, Foot Printing & Scanning).Open Source/ Free/ Trial Tools: nmap, zenmap, Port Scanners, Network scanners.	6
II	Cryptography and Cryptanalysis: Introduction to Cryptography, Symmetric key Cryptography, Asymmetric key Cryptography, Message Authentication, Digital Signatures, User Management, VPN Security, Security at Transport Layer- SSL and TLS, Security at Network Layer-IPSec.	08
III	Intrusion Detection and Response – Anomaly (network and host) – Specification based (network and host) – Human Factors: – Captcha's – Social engineering, e.g., phishing – Economics of Security – Incentives and motivations for attack.	10
IV	**Ethical Issues pertaining to IS**: · Ethical responsibilities of business professionals · Computer crime – hacking & cracking, cyber theft, unauthorized use at work, software piracy, theft of intellectual property, viruses & worms, adware and spyware.	12
V	**Information Security**: · First line of defence – People / employees' · Second line of defence – Technology for authorization, prevention, detection and response. **Contemporary/ emerging technologies**: · Cloud and mobile computing · E-commerce, m-commerce · Internet of Things	06

EVALUATION:

The students will be evaluated on a continuous basis and broadly follow the scheme given below:

		Weight age
A	Assignment & Presentation	20%
B	Internal Assessment	30% (I.A.)
C	End-Semester Examination	50% (External Assessment)

SUGGESTED READINGS:
Text Books:

Sr. No	Author/s	Name of the Book	Publisher	Edition & Year
T1	Michael T. Goodrich and Roberto Tamassia	Introduction to Computer Security	Addison Wesley	2011
T2	William Stallings	Cryptography and Network Security	Pearson Education	4th Edition2010

Reference Books:

Sr. No	Author/s	Name of the Book	Publisher	Edition and Year
R-01	Alfred J. Menezes, Paul C. van Oorschot and Scott A. Vanstone	Handbook of Applied Cryptography	CRC Press	2001
R-02	Nina Godbole	"Information System Security"	Wiley	2016
R-03	Bothra Harsh	"Hacking"	Khanna Publishing House, Delhi	2010