Course Code	Course Name	Teaching Scheme (Hrs/week)			Credits Assigned			
		L	T	P	L	T	P	Total
MCA5051	Cyber Security	4	-	--	4	-	--	4
		Examination Scheme						
		ISE		MSE	ESE			
		10		30	100 (60% Weightage)			

Pre-requisite Course Codes		
Course Outcomes	CO1	To understand the basics of Cybercrime and Cyber security
	CO2	To analyze the issues and challenges faced due to cyber crime
	CO3	To evaluate various tools and methods used in cybercrime
	CO4	To analyse the laws for cyber crime
	CO5	To analyze the effect of cybercrime in an organization

Module No.	Unit No.	Topics	Ref.	Hrs.
1		**Introduction to Cybercrime**		4
	1.1	Cybercrime definition and origins of the world,		
	1.2	Cybercrime and information security		
	1.3	Classifications of cybercrime		
2		**ITA 2000**		4
	2.1	Cybercrime and the Indian ITA 2000,		
	2.2	A global Perspective on cybercrimes		
3		**Cyber offenses& Cybercrime: Issues and challenges**		12
	3.1	How criminal plan the attacks, Social Engineering		
	3.2	Cyber stalking, Cyber cafe and Cybercrimes Botnets,		
	3.3	Attack vector, Cloud computing		
	3.4	Proliferation of Mobile and Wireless Devices		
	3.5	Trends in Mobility		
	3.6	Credit Card Frauds in Mobile and Wireless Computing Era		
	3.7	Security Challenges Posed by Mobile Devices,		
	3.8	Registry Settings for Mobile Devices		
	3.9	Authentication Service Security		
	3.10	Attacks on Mobile/Cell Phones,		
	3.11	Mobile Devices: Security Implications for Organizations,		
	3.12	Organizational Measures for Handling Mobile		
	3.13	Devices-Related Security Issues		
	3.14	Organizational Security Policies and Measures in Mobile Computing Era, Laptops		
	3.15	Internet Filtering Encryption issues		
	3.16	Internet Gambling, Spam - Unsolicited Junk Email		
	3.17	Digital Signatures		
	3.18	Anti-Spam Laws, Anti-Spam Suits		
	3.19	What is Cyber squatting? Ant cyber squatting		
	3.20	Software Piracy		

	3.21	Domain Name Disputes,		
	3.22	File Sharing		
4		**Tools and Methods Used in Cyberline**		6
	4.1	Proxy Servers and Anonymizers		
	4.2	Phishing, Password Cracking		
	4.3	Keyloggers and Spywares		
	4.4	Virus and Worms		
	4.5	Steganography,		
	4.6	DoS, DDoS Attacks		
	4.7	SQL Injection		
	4.8	Buffer Over Flow		
	4.9	Attacks on Wireless Networks		
	4.10	Phishing, Identity Theft (ID Theft)		
5		**Cybercrimes and Cybersecurity:**		6
	5.1	The Legal Perspectives Why do we need Cyberlaw: The Indian Context, The Indian IT Act,		
	5.2	Digital Signature and the Indian IT Act, Amendments to the Indian IT Act,		
	5.3	Cybercrime and Punishment, Cyberlaw, Technology and Students: Indian Scenario		
6		**Cybersecurity: Organizational Implications**		8
	6.1	Cost of Cybercrimes and IPR Issues: Lesson for Organizations		
	6.2	Web Treats for Organizations: The Evils and Perils		
	6.3	Security and Privacy Implications from Cloud Computing		
	6.4	Social Media Marketing: Security Risk and Perils for Organization		
	6.5	Social Computing and the Associated Challenges for Organizations		
	6.6	Protecting People's Privacy in the Organization		
	6.7	Organizational Guidelines for Internet Usage		
	6.8	Safe Computing Guidelines and Computer Usage Policy		
	6.9	Incident Handling: An Essential Component		
	6.10	Intellectual Property in the Cyberspace of Cybersecurity		
	6.11	Importance of Endpoint Security in Organizations		
7		**Cyber Acts and related issues**		5
	7.1	Children's Online Privacy Protection Act (COPPA)		
	7.2	The Children's Internet Protection Act (CIPA Sexual Predator Laws)		
	7.3	The Child Online Protection Act (COPA)		
	7.4	The Communications Decency Act (CDA)		
	7.5	Electronic Signatures in Global & National Commerce Act (E-Sign)		
			Total	**45**

References:

[1] Nina Godbole, SunitBelapure, “Cyber Security: Understanding Cyber Crimes, Computer Forensics and Legal Perspectives”, Wiley India, New Delhi
[2] KAHATE ,”Cryptography and Network Security”, TMH
[3] Nina Godbole “Information Systems Security”, Wiley India, New Delhi
[4] Dan Shoemaker, William Arthur Conklin, Wm Arthur Conklin “Cybersecurity: The Essential Body of Knowledge”, Cengage Learning.
[5] Edward Amoroso “Cyber Security”, Silicon Press, First Edition
[6] Kennetch J. Knapp “Cyber Security &Global Information Assurance”, Information Science Publishing.
[7] William Stallings, “Cryptography and Network Security”, Pearson Publication