

St. Mira's College for Girls, Pune
M.sc Computer Science
Compulsory Credit Course
Introduction to Cyber Security / Information Security
Total Credit =4 [For 100 marks]

Lectures Distribution

Module	Module Name	No Of Lectures	Classroom lectures	Self-based lectures
1	Pre-requisites in Information and Network Security	14	6	8
2	Security Management	13	1	12
3	Information and Network Security	13	1	12
4	System and Application Security	20	7	13
		60	15	45

[25% classroom teaching+75% self-based learning]

Evaluation Type based on each module

Module	Module Name	Type of exam	Marks	Credit
1	Pre-requisites in Information and Network Security	Multiple choice questions	25	1
2	Security Management	Assignment	25	1
3	Information and Network Security	Open book test	25	1
4	System and Application Security	Presentation	25	1
			100	4

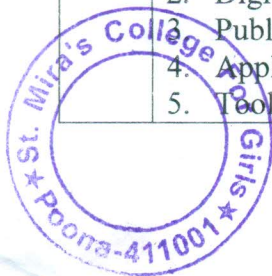


Dr. Shalini Iyer
Course Coordinator

Mr. Swati Pulate

Module-1
Pre-requisites in Information and Network Security
Total Number of lectures 14

Chap No	Topic	No. of Lect.	Study Material	Minute
1	Overview of Networking Concepts - Basics of Communication Systems - Transmission Media - Topology and Types of Networks - TCP/IP Protocol Stacks - Wireless Networks - The Internet	3	- E-Resource for Chap-1 Recorded lectures: - Lecture-1 - Lecture-2 - Lecture-3 - Lecture-4 Reference material: - Transmission Media - Types of Network - TCP/IP Protocol - Wireless Network - Internet	65 12 24 30 39 22 14 05 17 13
			Minutes	241
2	Information Security Concepts - Information Security Overview: Background and Current Scenario - Types of Attacks - Goals for Security - E-commerce Security - Computer Forensics - Steganography	3	- E-Resource for Chap-2 Recorded lectures: - Lecture-1 - Lecture-2 - Lecture-3 Reference material: - Information Security - Goal for Security - Digital Watermark - E-commerce Security - Computer Forensics - Steganography	60 44 40 44 11 03 07 11 15 14
			Minutes	249
3	Security Threats and Vulnerabilities - Overview of Security threats - Weak / Strong Passwords and Password Cracking - Insecure Network connections - Malicious Code - Programming Bugs - Cybercrime and Cyber terrorism - Information Warfare and Surveillance	4	Classroom Teaching E-resource for chap-3	
4	Cryptography / Encryption - Introduction to Cryptography / Encryption - Digital Signatures - Public Key infrastructure - Applications of Cryptography - Tools and techniques of	3	- E-Resource for Chap-4 Recorded lectures: - Lecture Reference material: - Digital Signature - Digital WaterMarking	100 30 05 06



Shalini Iyer
Dr. Shalini Iyer
Course Coordinator

Swati P. Iyer

	Cryptography		• <u>Applications of Cryptography</u> • <u>Tools and Techniques of cryptography</u>	• 17 • 15
			Minutes	173
	Module-1 Test(MCQ based)	1	Evaluation -online exam	60

Module-2
Security Management
Total Number of lectures =13

Chap No	Topic	No. of Lects.	Study Material	Minute
1	Security Management Practices 1. Overview of Security Management 2. Information Classification Process 3. Security Policy 4. Risk Management 5. Security Procedures and Guidelines 6. Business Continuity and Disaster Recovery 7. Ethics and Best Practices	6	• <u>E-Resource for Chap-1</u> Reference material: • <u>Cyber Law</u> • <u>Cyber Law need and security Policy</u> • <u>Information System Audit</u> • <u>Security Procedures and Guidelines</u> • <u>Ethics and Best Practices</u>	• 120 • 37 • 03 • 08 • 17 • 28
			Minutes	213
2	Security Laws and Standards 1. Security Assurance 2. Security Laws 3. IPR 4. International Standards 5. Security Audit 6. 6. SSE-CMM / COBIT etc	6	• <u>E-Resource for Chap-2</u> Reference material: • <u>Cyber Crime</u> • <u>IPR</u> • <u>SSE-CMM</u> • <u>Security Audit</u> • <u>COBIT</u>	• 90 • 16 • 12 • 07 • 120 • 03
			Minutes	248
	Module-2 Test	1	Evaluation -Assignment Test	60



Shalini Iyer
Dr. Shalini Iyer
Course Coordinator

(Swati Pulate)

Module-3
Information and Network Security
Total Number of lectures 13

Chap No	Topic	No. of Lectures	Study Material	Minute
1	Access Control and Intrusion Detection 1. Overview of Identification and Authorization 2. Overview of IDS 3. Intrusion Detection Systems and Intrusion Prevention Systems	3	• <u>E-Resource for Chapter-1</u> Recorded lectures: • <u>Lecture recording-1</u> • <u>Lecture Recording-2</u> Reference material: • <u>AAA Video</u> • <u>Access Control</u> • <u>Digital Signature Video</u> • <u>Digital Certificate Video</u> • <u>IDS & IPS Video</u> • <u>IDS Video</u>	• 70 • 10 • 30 • 05 • 05 • 05 • 08 • 08 • 07
			Minutes	150
2	Server Management and Firewalls 1. User Management 2. Overview of Firewalls 3. Types of Firewalls 4. DMZ and firewall features	4	• <u>E-Resource for Chapter-2</u> Recorded lectures: • <u>Lecture recording-1</u> • <u>Lecture recording-2</u> • <u>Lecture recording-3</u> • <u>Lecture recording-4</u> Reference material: • <u>DMZ Security Video</u> • <u>Firewall</u> • <u>Role Based Access Control</u>	• 120 • 22 • 08 • 20 • 41 • 07 • 13 • 11
			Minutes	242
3	Security for VPN and Next Generation Technologies 1. VPN Security 2. Security in Multimedia Networks 3. Various Computing Platforms: HPC, Cluster and Computing Grids 4. 4. Virtualization and Cloud Technology and Security	5	Classroom Teaching • <u>E-Resource for Chapter-3</u>	
	Module-1 Test	1	Evaluation-Open Book Test	60



Shalini Iyer
Dr. Shalini Iyer
Course Coordinator

[Signature]
[Eswari Pulate]

Module-4
System and Application Security
Total Number of lectures 20

Chap No	Topic	No. of Lect	Study Material	Minute
1	Security Architectures and Models 1. Designing Secure Operating Systems 2. Controls to enforce security services 3. Information Security Models	5	- E-Resource for Chap-1 Recorded lectures - Lecture 1 - Lecture-2 - Lecture-3 Reference material: - Biba Model Video - Operating System Security Concept	120 29 20 30 03 14
			Minute	216
2	System Security 1. Desktop Security 2. email security: PGP and SMIME 3. Web Security: web authentication, SSL and SET 4. Database Security	5	- E-Resource for Chap-2 Recorded lectures - Lecture-1 - Lecture-2 - Lecture-3 - Lecture-4 - Lecture-5 - Lecture-6 Reference material: - PGP - S-MIME	60 29 19 37 17 22 12 28 28
			Minute	252
3	OS Security 1. OS Security Vulnerabilities, updates and patches 2. OS integrity checks 3. Anti-virus software 4. Configuring the OS for security 5. OS Security Vulnerabilities, updates and patches	5	Classroom Teaching <u>E-Resource for Chap-3</u>	
4	Chapter 4: Wireless Networks and Security 1. Components of wireless networks 2. Security issues in wireless	3	- E-Resource for Chap-4 Recorded lectures - Lecture-1 Reference material: - Wireless Network Security Video	30 43 34
	Module-4 Test	2	Presentation based	120
			Minute	227



Shalini Iyer
Dr. Shalini Iyer
Course Coordinator

[Swati Pulate]



Sadhu Vaswani Mission's
ST. MIRA'S COLLEGE FOR GIRLS

Attendance Sheet [For CYBER SECURITY COMPULSORY CREDIT COURSE]

Teacher Name: Swati Pulate

Class: F.Y.M.Sc. [Comp Sci]

Division:(A)

Subject: Cyber Security Information Security

Batch: 2022-23

Sr. No.	Roll N.	Name	25 % Teaching + Evaluation															Online lectures attendance (10 Lectures)	Online lectures attendance (05 Lectures)	75% Self Based	Total Attendance %	
			15 Lectures																	45 Lectures		
			01.02.2023	Mar-23						Apr-23					TOTAL	%						
			11	11	11	18	18	18	22	25	25	30	13	16	16	17	17	OUT OF 15	OUT OF 45	OUT OF 60		
			Module 3 and 4									Module 1 and 2						%	%			
1	5801	Sakshi Shashikant Jagtap	P	P	P	P	A	A	P	P	P	P	P	A	P	P	P	10	78	0	100	60
2	5802	gurpreet kaur	A	A	A	P	A	A	P	P	P	P	P	A	P	P	P	9	44	60	100	69
3	5803	Sakshi Govardhan Zaware	P	P	P	P	A	P	P	P	P	P	P	P	P	P	P	14	89	94	100	95
4	5804	tanvi patange	P	P	P	P	A	A	A	P	P	P	P	A	P	P	P	11	67	74	100	81
5	5805	mrinal kokre	P	P	P	P	A	P	A	A	P	P	P	P	P	P	P	12	67	80	100	83
6	5806	Pratiksha Burge	A	P	P	A	A	A	P	P	P	P	P	A	P	P	P	10	56	67	100	75
7	5807	sakshi shinde	A	P	P	P	A	A	P	P	P	P	A	A	P	P	P	10	67	67	100	78
8	5808	riddhi kawade	P	P	P	P	A	P	P	P	P	P	A	P	P	P	P	13	89	87	100	92
9	5809	Pallavi Vijay Nalage	P	P	P	P	A	P	A	P	P	P	A	P	P	P	P	12	78	80	100	86
10	5811	anusha koppala	P	P	P	P	A	A	P	P	P	P	P	A	P	P	P	12	78	80	100	86
11	5812	harshada manjare	P	P	P	P	A	P	A	P	P	P	P	A	P	P	P	12	78	80	100	86
12	5813	Siddhita Hingade	P	P	P	P	A	P	A	P	P	P	A	A	P	P	P	11	78	74	100	84
13	5814	bhagyashree_ khandve	P	P	P	P	A	P	P	P	P	P	P	P	P	P	P	14	89	94	100	95
14	5815	Gayatri Pujari	P	P	P	P	A	A	A	P	P	P	P	A	P	P	P	11	67	74	100	81


Mrs. Swati Pulate
Course Instructor




Dr. Shalini Iyer
Coordinator
Course Coordinator

Sadhu Vaswani Mission's
ST. MIRA'S COLLEGE FOR GIRLS

Attendance Sheet [For CYBER SECURITY COMPULSORY CREDIT COURSE]

Teacher Name: Swati Pulate

Class: S.Y.M.Sc. [Comp Sci]

Division: (A)

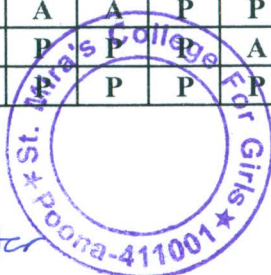
Subject: Cyber Security and information security

No. of Lectures=60

Batch: 2022-23

			25% Teaching+ Evaluation												75% Self based	Total
Sr. No.	Roll No.	Name	01.02. 2023	Mar-23								Total	%	Progress	%	
			11	11	11	18	18	18	22	25	25	30		Out Of 10		%
1	5901	Andrea Belsher	P	P	P	P	P	P	A	A	P	P	7	70	100	85
2	5902	Vaishnavi Dipak Bhujbal	P	P	P	P	P	P	P	P	P	P	9	90	100	95
3	5903	Kshitija Nitin Gaikwad	P	P	P	P	P	P	P	A	P	P	8	80	100	90
4	5904	Doyita Mazumdar	A	P	A	P	P	P	A	P	P	P	6	60	100	80
5	5905	Dipali Shinde	P	P	P	P	P	A	A	P	P	P	7	70	100	85
6	5906	Prof Shweta Rajkumar Survase	P	P	P	P	P	P	P	P	P	P	9	90	100	95
7	5907	Arti Tathe	P	P	P	P	P	P	A	P	P	P	8	80	100	90
8	5908	Devyani Rupeeja	P	P	P	P	P	P	A	A	P	P	7	70	100	85
9	5909	Aishwarya Jagtap	P	P	P	P	P	P	A	P	P	P	8	80	100	90
10	5910	Rutika Kapai	P	A	A	P	P	P	A	P	P	P	6	60	100	80
11	5911	Megha Kuttat	P	P	P	P	P	P	P	P	P	P	9	90	100	95
12	5912	Yukta Raval	P	P	P	P	P	P	P	P	P	P	9	90	100	95
13	5913	Hadiya Parkar	A	P	A	P	P	A	A	P	P	P	5	50	100	75
14	5914	Mrunali Siddha	P	P	P	P	P	P	P	P	P	P	9	90	100	95
15	5915	Shweta Thakur	P	P	P	P	P	P	A	A	P	P	7	60	100	80
16	5916	Sneha Sable	P	P	P	P	P	P	P	P	P	P	9	90	100	95
17	5917	Janhavi Jetla	A	P	A	A	A	A	A	A	P	P	2	30	100	65
18	5918	Phalguni Chanchlani	A	A	A	A	A	P	P	P	P	P	4	40	100	70
19	5919	Ronek Kaur	P	A	A	A	A	P	P	P	P	P	5	60	100	80
20	5920	Uzma Shaikh	P	P	P	P	P	P	A	A	P	P	7	60	100	80
21	5921	Sanjana Gaikwad	P	P	P	P	P	P	P	P	P	P	9	80	100	90

Swati
Mr. Swati Pulate
Course Coordinator & Instructor



Shalini
Dr. Shalini Yawar
Course Coordinator

Sadhu Vaswani Mission's
ST. MIRA'S COLLEGE FOR GIRLS

Attendance Sheet [For CYBER SECURITY COMPULSORY CREDIT COURSE]

Teacher Name: Swati Pulate

Class: S.Y.M.Sc. [Comp Sci]

Division:(A)

Subject: Cyber Security and information security

No. of Lectures=60

Batch:2022-23

			25% Teaching+ Evaluation												75% Self based	Total
Sr. No.	Roll No.	Name	01.02. 2023	Mar-23									Total	%	Progress	%
			11	11	11	18	18	18	22	25	25	30	Out Of 10		%	
22	5922	Sejal Agarwal	P	P	P	P	P	P	A	A	P	P	7	60	100	80
23	5923	Rutuja Malav	P	A	A	P	P	P	A	P	P	P	6	40	100	70
24	5924	Akshra Patil	P	A	A	A	A	A	A	P	P	P	3	30	100	65
25	5925	Pooja Gaikwad	P	P	A	A	A	P	P	P	P	P	6	30	100	65


Mrs. Swati Pulate
Coure Instructor




Dr. Shalini Iyer
Coordinator

Name of Credit Course : Cyber Security and Information Security

No. of Credits : 4

Period From : April 2023-May 2023

Name of the Teacher Incharge : Prof Swati Pulate

Sr.No.	Roll No.	Name of the Student	Marks Obtained		
			Module1 (Out of 25)	Module2 (Out of 25)	Module3 (Out of 25)
1	5801	Sakshi Shashikant Jagtap	18	25	25
2	5802	gurpreet kaur	21	25	25
3	5803	Sakshi Govardhan Zaware	17	25	25
4	5804	tanvi patange	20	25	25
5	5805	mrinal kokre	21	25	25
6	5806	Pratiksha Burge	16	25	25
7	5807	sakshi shinde	24	25	25
8	5808	riddhi kawade	22	25	25
9	5809	Pallavi Vijay Nalage	19	25	25
10	5811	anusha koppala	17	25	25
11	5812	harshada manjare	21	20	25
12	5813	Siddhita Hingade	21	14	25
13	5814	bhagyashree_ khandve	18	25	25
14	5815	Gayatri Pujari	17	25	25

Name & Signature of the Course Instructor

Name & Signature of Course Co-ordinator



**Mission's
r Girls, Pune**

Class & Div:F.Y.M.SC.(Computer Sciene)

	Out of 100	% of Attendance	No. of Credits	Signature of the student
Module4 (Out of 25)				
23	91	86	4	
24	95	69	4	
22	89	95	4	
23	93	81	4	
25	96	83	4	
23	89	75	4	
25	99	78	4	
22	94	92	4	
24	93	86	4	
23	90	86	4	
24	90	86	4	
25	85	84	4	
22	90	95	4	
23	90	81	4	

Signed by

Dr.Shalini Iyer

linator

Name & Signature of Co-ordinator



**Sadhu Vaswani Mission's
St. Mira's College for Girls, Pune**

Name of Credit Cyber Security and Information Security

No. of Credits : 4

Period From : April 2023-May 2023

Class & Div:S.Y.M.SC.(Computer Sciene)

Name of the Teacher Incharge : Prof Swati Pulate

Sr.No.	Roll No.	Name of the Student	Marks Obtained				Out of 100	% of Attendance	No. of Credits	Signature of the student
			Module1 (Out of 25)	Module2 (Out of 25)	Module3 (Out of 25)	Module4 (Out of 25)				
1	5901	Andrea belsher	16	25	25	25	91	85	4	
2	5902	Vaishnavi Dipak Bhujbal	17	23	25	23	88	95	4	
3	5903	KSHITIJA NITIN GAIKWAD	24	25	25	24	98	90	4	
4	5904	doyita mazumdar	22	23	25	22	92	80	4	
5	5905	dipali shinde	17	20	25	22	84	85	4	
6	5906	Shweta Rajkumar Survase	20	25	25	22	92	95	4	
7	5907	arti tathe	21	20	25	23	89	90	4	
8	5908	devyani rupeeja	17	23	25	23	88	85	4	
9	5909	aishwarya jagtap	22	25	25	25	97	90	4	
10	5910	rutika kapai	20	21	25	22	88	80	4	
11	5911	megha kuttat	21	24	25	24	94	95	4	
12	5912	yukta raval	23	21	25	22	91	95	4	
13	5913	Hadiya Parkar	19	20	25	25	89	75	4	
14	5914	Mrunali Siddha	18	22	25	22	87	95	4	
15	5915	shweta thakur	19	21	25	23	88	80	4	
16	5916	sneha sable	9	22	25	13	69	95	4	
17	5917	Janhavi Jetla	12	12	20	12	56	65	4	
18	5918	phalguni chanchlani	20	20	25	20	85	70	4	
19	5919	Ronek Kaur	17	22	25	22	86	80	4	
20	5920	uzma shaikh	20	20	25	23	88	80	4	
21	5921	sanjana gaikwad	18	20	25	24	87	90	4	
22	5922	sejal agarwal	18	21	25	24	88	80	4	
23	5923	Rutuja Malav	17	20	25	24	86	70	4	
24	5924	Akshra Patil	20	20	25	12	77	65	4	



**Sadhu Vaswani Mission's
St. Mira's College for Girls, Pune**

Name of Credit Cyber Security and Information Security

No. of Credits : 4

Period From : April 2023-May 2023

Class & Div:S.Y.M.SC.(Computer Sciene)

Name of the Teacher Incharge : Prof Swati Pulate

	Roll		Marks Obtained					% of	No. of	Signature
25	5925	Pooja Gaikwad	22	20	25	22	89	65	4	

Signed by

Mrs Swati Pulate

Name & Signature of the Course Instruct

Signed by

Mrs Swati Pulate

Name & Signature of Course Co-ordinator

Signed by

Dr. Shalini Iyer

Name & Signature of Co-ordinat

