



Sub Committee for Curriculum Development

Course Name: Applied Cryptography

(UG/PG): PG

Number of Credits: 3

Level: 4

Learning Objective(s):

- This course provides students with good background on cryptography and practical cryptographic implementations. The course will describe how crypto is implemented at various levels of computing and networks and where to look for gaps and flaws in implementations.

Pedagogy:

- Lectures
- discussion
- Case studies
- Hands-on lab work

Pre-learning:

- Basic knowledge of cryptography.

Course Outline:

S.No.	Topic	Hours
1	Introduction to building blocks of Cryptography	5
2	Cryptographic implementation in Protocols	10
3	Cryptography in Enterprise Networks	10
4	Authentication and Network Security	5
5	Cryptographic Attacks	5
6	Crypt analysis techniques	5
7	Miscellaneous Crypto implementations <ul style="list-style-type: none">• Secure Boot Loader UEFI• Security in Android platform• GSM Encryption A5/1 and attacks	5
	Total	45

Books Recommended

Suggested Evaluation Methods:

- On-line examination
- Presentations
- Practical Demonstrations

Parallel/Similar courses the existing curriculum:

S. No.	Name of the course	Institute where it was offered

Name of Member	Sudhanwa Joglekar			
Designation	VF			
Org. / Inst.	SICSR			
Signature				

Name of the Expert:

Signature:

Date: