



Department of Computer Applications National Institute of Technology, Tiruchirappalli

1. Course Outline			
Course Title	Information Security Lab		
Course Code	CA708		
Department	CA	No. of Credits	2
Programme	MCA (B)	Lab Hours	3
Course Type	Laboratory	Course Teacher	Dr. Mrs. B. Janet
Pre-requisites	CA 713, Basics on Networks, Operation Systems and Database		
E-mail	janet@nitt.edu	Telephone No.	0431-2503741
Course Type	Lab Course	Office	Lyceum 108
Course Page	http://egov.nitt.edu/moodle/course/view.php?id=25		

2. Course Content

The Information Security Lab deals with the study and analysis of security in computers. It also explores Cryptography, Forensics, Network, Application and Data security problems.

3. Course Objectives

1. To experiment the models of information security
2. To study and analyze cryptographic and forensic methods
3. Analyze and simulate the network security and application security
4. Explore the nature and logic behind security threats on the web as an ethical hacker

4. Course Learning Outcomes (CO)

1. Identify the information security models and their characteristics
2. Analyze the different types of cryptographic and forensic methods
3. Study the network security issues
4. Study the application security problems and apply the fixes
5. Identify different threats using tools and suggest fixes for security issues.

5. Course Outcome (CO)	Aligned Programme Outcome (PO)											
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
Identify information security models and their characteristics	H	H	A	A	A	H	H	A	L	H	A	H
Analyze the different types of cryptographic and forensic methods	H	H	A	A	H	A	H	A	L	A	A	H
Study the network security issues	H	H	H	A	H	A	H	L	L	H	H	H
Study the application security problems and apply the fixes	H	H	H	H	H	A	H	L	L	H	H	H
Identify different threats using tools and suggest fixes for security issues.	H	H	H	H	H	H	H	H	A	H	H	H

Exercise

The Moodle site will be available for detailed lab exercise dissemination and discussion inside and outside the Laboratory, between students and with the teacher. Student engagement in the Moodle online forum will count towards assessment of student participation that has assessment weightage.

6. Lab Exercise

Week	Topic	Exercise
1	Physical security	Refer Moodle Course Site
2	Access security	
3	SDLC Security	
4	Cryptography	
5	OS Security	
6	Steganography and Biometrics	
7	Network security	
8	Application Security	

Week	Topic	Exercise
9	Security Tools	
10	Web Application Exploits	

The assessment details for this course are given below. The assessment will be done for a total of 100 marks.

7. Course Assessment Methods – Theory					
Sl. No.	Mode of Assessment	Nature	Tentative Schedule	Duration in Min.	Weightage (%)
1.	Test	Formative	4 th week	60	10
2.	Test	Formative	8 th week	60	15
3.	Lab activity	Periodic	Lab duration	NA	50
4.	End Semester Exam	Summative	11 th week	120	25
Total					100

8. Lab Survey

- The students may give their feedback at any time to the course Teacher or through an email message in moodle, which will be duly addressed.
- The students may also give their feedback during Class Committee meeting and fill up the feedback form in moodle site at the end of each test.

10. Course Policy (including plagiarism, academic honesty, attendance, etc.)

Lab Behavior

- Ensure that the course atmosphere, both in the Lab and discussions outside the Lab with Teacher, is conducive for learning. Participate in discussions but do not dominate or be abusive. Be considerate of your fellow students and avoid disruptive behavior.

Exam policy

- Each student is required to take all exams at the scheduled times. All exceptions must be cleared with the professor prior to the exam time. Exams missed for insufficient reason and without being cleared with the professor prior to the exam time will be assigned a score of zero.

Assignments

- All assignments are due on or before the mentioned date and time and is to be uploaded on the Lab moodle site.

Late assignments

- Late submissions are not accepted.

Plagiarism

- The students are expected to come out with their original work on Lab activity, assignments and tests/examinations. If found to be plagiarized, it will be assigned a score of zero.

Attendance

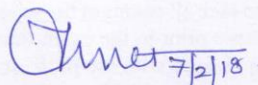
- Attendance is expected. If a student misses a Lab, the student is still responsible for the material that is studied and for completing any assignments by the due date that may have been handed out by the instructor during class.

Academic Honesty

- No type of academic dishonesty will be tolerated. If the student is caught cheating (on the assignments, exams, or project) the punishment will be the most severe penalty allowed by the Institute policy.
- Possession of any electronic device, if any, found during the test or exam, the student will be debarred for 3 years from appearing for the exam and this will be printed in the Grade statement/Transcript.
- Tampering of MIS records, if any, found, then the results of the student will be withheld and the student will not be allowed to appear for the Placement interviews conducted by the Office of Training & Placement, besides (i).

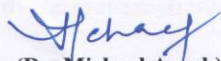
11. Additional Course Information

- The students can get their doubts clarified during Lab.
- Prior request for appointment through mail, stating the subject matter to be discussed, is required to fix a time for discussion of subject matter outside class. Appointment time will be communicated through reply mail.

For Senate's Consideration

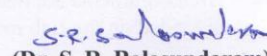
(Dr. Mrs. B. Janet)

Course Faculty



(Dr. Michael Arock)

PAC Chairperson



(Dr. S. R. Balasundaram)

Head