



Subject Code: 10CE0103

Subject Name: Information Security Risk Assessment and Assurance

M.Tech. Year - I

Objective: The purpose is to understand the risk assessment while handling and processing information and implementing security in audit.

Credits Earned: 4 Credits

Course Outcomes: After completion of this course, student will be able to

- To gain the knowledge about Information Risk.
- Analyse the various control structures that requires to use in real time applications
- To discovery knowledge in collecting data about organization.
- To do various analysis on Information Risk Assessment.
- To understand IT audit and its activities.

Pre-requisite of course: Computer Network

Teaching and Examination Scheme

Teaching Scheme (Hours)			Credits	Theory Marks			Tutorial/ Practical Marks		Total Marks
Theory	Tutorial	Practical		ESE (E)	Mid Sem (M)	Internal (I)	Viva (V)	Term work (TW)	
3	0	2	4	50	30	20	25	25	150

Contents:

Unit	Topics	Contact Hours
1	INTRODUCTION What is Risk? –Information Security Risk Assessment Overview- Drivers, Laws and Regulations- Risk Assessment Frame work – Practical Approach.	9

2	DATA COLLECTION The Sponsors- The Project Team- Data Collection Mechanisms- Executive Interviews- Document Requests- IT Assets Inventories- Profile & Control Survey- Consolidation.	9
3	DATA ANALYSIS Compiling Observations- Preparation of catalogs- System Risk Computation- Impact Analysis Scheme- Final Risk Score..	9
4	RISK ASSESSMENT System Risk Analysis- Risk Prioritization- System Specific Risk Treatment- Issue Registers- Methodology- Result- Risk Registers- Post Mortem.	9
5	SECURITY AUDIT PROCESS) Pre-planning audit- Audit Risk Assessment- Performing Audit- Internal Controls- Audit Evidence- Audit Testing- Audit Finding- Follow-up activities	9
Total Hours		45

References:

1. Mark Talabis, “*Information Security Risk Assessment Toolkit: Practical Assessments through Data Collection and Data Analysis*”, Syngress; 1 edition, ISBN: 978-1-59749-735-0, 2012.
2. David L. Cannon, “*CISA Certified Information Systems Auditor Study Guide*”, John Wiley & Sons, ISBN: 978-0-470-23152-4, 2009.

Suggested Theory distribution:

The suggested theory distribution as per Bloom’s taxonomy is as per follows. This distribution serves as guidelines for teachers and students to achieve effective teaching-learning process

Distribution of Theory for course delivery and evaluation					
Remember	Understand	Apply	Analyze	Evaluate	Create
5%	10%	15%	30%	20%	30%



Suggested List of Experiments:

Instructional Method:

- a. The course delivery method will depend upon the requirement of content and need of students. The teacher in addition to conventional teaching method by black board, may also use any of tools such as demonstration, role play, Quiz, brainstorming, MOOCs etc.
- b. The internal evaluation will be done on the basis of continuous evaluation of students in the laboratory and class-room.
- c. Practical examination will be conducted at the end of semester for evaluation of performance of students in laboratory.
- d. Students will use supplementary resources such as online videos, NPTEL videos, e-courses, Virtual Laboratory

Supplementary Resources:

1. <http://www.isaca.org/Certification/CISA-Certified-Information-Systems-Auditor/Pages/default.aspx>