

Indian Institute of Information and Technology, Allahabad

Lecture List

Database Security (Elective)

Credit hours: 3

Total lectures: 45

Program: M.Tech (CLIS) (3rd Sem)

Course Objective

- Study of security issues in Database, Multilevel and Distributed database.
- Formulate a working definition of database security and administration.

Prerequisite: Introduction to Information Security
Database Management System

Syllabus:

- Review of Database Management System and information security.
- Introduction to Database Security
- Access Control Model for relational database
- Access Control Model for XML database
- Inference Problem in Database
- Multilevel Database and its security issues
- Security in Multilevel Database
- Security in Distributed Databases
- Database Integrity Auditing

Reference Books

Michael Gertz and Sushil Jajodia (Editors) , Handbook of Database Security: Applications and Trends , ISBN-10: 0387485325. Springer, 2007

Osama S. Faragallah, El-Sayed M. El-Rabaie, Fathi E. Abd El-Samie, Ahmed I. Sallam, and Hala S. El-Sayed, Multilevel Security for Relational Databases by; ISBN 978-1-4822-0539-8. CRC Press, 2014.

Bhavani Thuraisingham, Database and Applications Security: Integrating Information Security and Data Management, CRC Press, Taylor & Francis Group, 2005.