

E0 261 August 3:1

Database Management Systems

Instructor

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Teaching Assistant

Email:

Department: CSA

Course Time:

Lecture venue:

Detailed Course Page: http://dsl.cds.iisc.ac.in/~course/DBMS/DBMS.html

Announcements

Brief description of the course

This is a graduate course that covers in depth the conceptual foundations and implementation architectures for the design of enterprise database systems.

Prerequisites

Undergraduate course on data modeling, formal and user query languages, logical and physical design of relational databases

Syllabus

Query Optimization, Query Statistics, Query Processing, Memory Management, Access Structures,

Transaction Management, Distributed Databases, Data Mining, Data Warehousing, Main-Memory Databases,

Columnar Databases, BASE systems

Course outcomes

The students would be fully conversant with the design principles of the engines and middleware of contemporary database systems, and their interactions with the related computing components, including the hardware, the operating system, and the data network.

Grading policy

30% mid-term, 30% project, 35% final exam, 5% class participation

Assignments

Resources

Public-domain software, standard international database textbooks