



Data Base Management Systems

SWAYAM Prabha Course Code: R10

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DEPARTMENT	Computer Science and Engineering
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COURSE OUTLINE	<p>Databases form the backbone of all major applications today tightly or loosely coupled, intranet or internet based, financial, social, administrative, and so on. Structured Database Management Systems (DBMS) based on relational and other models have long formed the basis for such databases. Consequently, Oracle, Microsoft SQL Server, Sybase etc. have emerged as leading commercial systems while MySQL, PostgreSQL etc. lead in open source and free domain. More specifically, the course introduces relational data models; entity-relationship modeling, SQL, data normalization, and database design.</p> <p>Course Outline</p> <ol style="list-style-type: none">1. Course Overview. Introduction to RDBMS2. Structured Query Language (SQL)3. Relational Algebra. Entity-Relationship Model4. Relational Database Design5. Application Development. Case Studies. Storage and File Structure6. Indexing and Hashing. Query Processing7. Query Optimization. Transactions (Serializability and Recoverability)8. Concurrency Control. Recovery Systems. Course Summarization.