

IS335: Database Management Systems

- Credit Hours (lecture, lab, tutorial): **3** (3 + 0 + 1)
- Prerequisites: IS230.

Course content: DBMS architecture and administration; centralized and client-server approaches, system catalog, and data dictionary. Transaction management; concepts, characteristics, and processing, recovery techniques, concurrency control techniques: serializability, deadlock, locking schemes, time-stamp ordering, multi-version, and optimistic techniques. DB security. Distributed databases, distributed DBMS, data fragmentation and replication, distributed transactions management. Object-oriented databases. Introducing new emerging DB technologies and applications; Web DBs, multimedia DBs, data warehousing, data Mining, ... etc.