

IS230: Introduction to Database Systems

- Credit Hours (lecture, lab, tutorial): **3** (3 + 0 + 1)
- Prerequisites: IS200, CSC212.

Course content: Characteristics and advantages of the database systems, database concepts and architecture; data models, database schemes and instances, Database Management Systems (DBMS) and the concept of program-data independence, database languages and interfaces. Relational data model and relational algebra, relational model constraints; domains, keys, and integrity constraints. Structured query language (SQL); data definition, queries, update, manipulation statements, and views in SQL. Database design; functional dependencies, normal forms. Design by using Entity relationship mapping. Introduction to object oriented databases (OODB).