

# Database1

This course introduces students to database systems, topics include: Database concepts: characteristics of database approach, database architecture, data models, schemas and instances, DBMS architecture and data independence, Database language and interface. Database design: data modeling using the entity relationship (ER) model and (ER) model concepts. The relational data model: relational model concept and relational model concepts, relational languages, relational algebra, relational calculus, and relational database design using ER to relational mapping. SQL – a relational database language: queries, views, in SQL. Data normalization: theory, normal form (NF) concepts, functional dependency concepts, normalization process using 2NF and 3NF