

Course Code	Course Name	Credit Hours	Prerequisite
216 CIS - 3	Database Management System	3 (2,2,0)	112 CIS -3

### Course Description:

This course introduces the concepts of database management systems (DBMS) used by modern organizations. It will concentrate on Data Models, Relational model and SQL, Database analysis and Design, Entity-Relationship (ER) Modeling and Diagram, and Normalization. It also provides the database designing using Oracle environment.

### Course Objectives:

This course aims to:

- Provide students with a good understanding of concepts and terminology related to the analysis and designing of DBMS.
- Develop the skills of designing database systems using ER model and UML.
- Develop the skills of implementing database systems using SQL, and Oracle environment.
- Enable students to communicate with others effectively and benefit from the information sources in the self-development ability in the field of database in order to analyze and design a real world database system.

### Textbook:

Abraham Silberschatz, Henry Korth, Database System Concepts 6th Edition, McGraw-Hill (2011), ISBN 978-0-07-352332-3.

### Reference Books:

1. Raghu Ramakrishnan, Johannes Gehrke, Database Management Systems, Third Edition, The McGraw-Hill Companies 3rd edition August 11, 2009. ISBN-13: 978-0072465631.
2. Kevin Loney, Oracle Database 11g: The Complete Reference, McGraw-Hill December 17, 2009, ISBN-9780071598750.