## uc3m Universidad Carlos III de Madrid

OpenCourseWare

## **Database**

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Main guide to follow the Unit 2.3. Introduction database management systems



The objectives of this course are mainly to gain knowledge about information systems and databases, which includes acquiring knowledge in the data model as a design tool to create a database.

The process of designing/using the relational model is learned, and practical experience using data language (SQL) to create, develop and manipulate a database is acquired. In addition, management and use of the database technology using commercial Database Management Systems (DBMSs) are learned.

This course covers not only relational databases but also the main fundamentals of current NoSQL databases. The experience in practical uses of a data language to create a NoSQL database is acquired. Finally, managing and using database technology using commercial NoSQL-type DBMSs are studied.

## Unit 2.3. Introduction database management systems

The main objectives of Unit 2.3 are:

- Learn to manage and use database technology using a commercial DBMS.
- Gain knowledge about the database administrator's responsibilities
- Acquire knowledge of the transaction concept.
- Acquire knowledge of security and recovery of a database.
- Acquire knowledge about database optimization.