

# COURSE DETAIL

## DATABASES

**Country**

United Kingdom - England

**Host Institution**

London School of Economics

**Program(s)**

London School of Economics

**UCEAP Course Level**

Upper Division

**UCEAP Subject Area(s)**

Statistics

**UCEAP Course Number**

107

**UCEAP Course Suffix****UCEAP Official Title**

DATABASES

**UCEAP Transcript Title**

DATABASES

**UCEAP Quarter Units**

6.00

**UCEAP Semester Units**

4.00

## Course Description

This course covers basic concepts of database management systems, including relational and other types of database management systems. The topics covered include basic concepts of the relational model, creating and modifying relations using Structured Query Language (SQL), basic SQL queries using SELECT operator, nested queries, aggregate operators such as GROUP BY, integrity constraints and relations, views, application development using JDBC, Internet protocols such as HTTP and XML, storage and indexing, tree-structured indexing using B+ trees, hash-based indexing, query evaluation and algorithms for relational operations, external sorting, transaction management and concurrency, database schema and normal forms, and overview of NoSQL databases such as key-value stores, document, and graph databases. The course demonstrates how various theoretical principles are implemented in practice in a database management system, such as MySQL, SQLite and PostgreSQL.

### Language(s) of Instruction

English

### Host Institution Course Number

ST207

### Host Institution Course Title

DATABASES

### Host Institution Campus

London School of Economics

### Host Institution Faculty

### Host Institution Degree

### Host Institution Department

Statistics

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