

# COURSE DETAIL

## DATABASE DESIGN

**Country**

China

**Host Institution**

Fudan University

**Program(s)**

Fudan University

**UCEAP Course Level**

Upper Division

**UCEAP Subject Area(s)**

Computer Science

**UCEAP Course Number**

125

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

DATABASE DESIGN

**UCEAP Transcript Title**

DATABASE DESIGN

**UCEAP Quarter Units**

4.50

**UCEAP Semester Units**

3.00

## Course Description

The course aims to make students understand the development history of database technology and the current status of database technology and products in China. It familiarizes students with the architecture and basic concepts of database systems, and provides them with the basic principles and methods of database design. Students are expected to have the ability to independently design database schemas and develop database applications.

Basic Content Overview: The course covers the following topics:

1. Development history of database technology and typical database products.
2. Relational model and database query language, including the basic structure of a relational database, relational algebra, tuple relational calculus, domain relational calculus, and the basic syntax and common usage of SQL.
3. Basic theories and methods of database design, including the entity-relationship model, database design normalization theory, functional dependencies, and their applications.
4. Practical issues in database design, including design case analysis, database optimization, storage structure and indexing, and transaction management.

## Language(s) of Instruction

Chinese

## Host Institution Course Number

SOFT130015

## Host Institution Course Title

DATABASE DESIGN

## Host Institution Course Details

## Host Institution Campus

**Host Institution Faculty**

Jianyi WU

**Host Institution Degree****Host Institution Department**

Software School

**Course Last Reviewed**

2023-2024

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