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. Basictheoriesandmethodsofdatabasedesign,includingtheentity-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 Campus

Host Institution Faculty
Jianyi WU

Host Institution Degree

Host Institution Department
Software School

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