COURSE DETAIL

DATABASE DESIGN I

Country
Sweden

Host Institution
Uppsala University

Program(s)
Uppsala University

UCEAP Course Level
Upper Division

UCEAP Subject Area(s)
Computer Science

UCEAP Course Number
117

UCEAP Course Suffix

UCEAP Official Title
DATABASE DESIGN I

UCEAP Transcript Title
DATABASE DESIGN I

UCEAP Quarter Units
4.00

UCEAP Semester Units
2.70

Course Description
This course covers the principles of database design, data representation and information search with modern (relational) database engines, and the practical use and development of databases. Key ingredients are the Entity-relationship model and the query language SQL. The course covers the following: an introduction to the database area and database terminology; entitets-relations (ER) modelling and expanded entitets-relations (EER) modelling; an overview of the relational data model and relational algebra and transformation of the data representation from the ER data model to the relational data model; an introduction to physical database design with functional dependencies and normalization; an introduction to queries, updates and data definition with help of the query language SQL; an introduction to transactions, basic techniques for transaction management and concurrency control and recovery; an introduction to physical database design with file organization, single level index and tree index; an introduction to procedural SQL and the application interface; an orientation in advanced database applications and techniques.

Language(s) of Instruction
English

Host Institution Course Number
1DL301

Host Institution Course Title
DATABASE DESIGN I

Host Institution Campus
Faculty of Science and Technology

Host Institution Faculty

Host Institution Degree

Host Institution Department
Information Technology

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