COURSE DETAIL

INTRODUCTION TO DATABASES

Country
United Kingdom - Scotland

Host Institution
University of Edinburgh

Program(s)
Scottish Universities,University of Edinburgh

UCEAP Course Level
Upper Division

UCEAP Subject Area(s)
Computer Science

UCEAP Course Number
108

UCEAP Course Suffix

UCEAP Official Title
INTRODUCTION TO DATABASES

UCEAP Transcript Title
INTRO TO DATABASES

UCEAP Quarter Units
8.00

UCEAP Semester Units
5.30

Course Description

Databases encompass many areas of computer science, from formal logic to programming languages, from operating systems to algorithms and data structures. This course covers in detail the main language for relational databases, SQL. It also cover the theoretical query languages on which SQL's core is based, namely relational algebra and relational calculus. Other important topics covered during the course include normal forms, transaction processing, concurrency control, incomplete data and rudiments of query optimization. Topics include the relational model and rudiments of SQL; query languages: relational algebra and calculus; multisets, grouping and aggregation; database design: constraints and normal forms; advanced SQL: nested queries, triggers, null values, transaction management: concurrent schedules, conflict-serializability, locking; database access from applications: using SQL in a host programming language; and basics of indexing, query evaluation and optimization.

Language(s) of Instruction
English

Host Institution Course Number
INFR10080

Host Institution Course Title
INTRODUCTION TO DATABASES

Host Institution Campus
Edinburgh

Host Institution Faculty

Host Institution Degree

Host Institution Department
Informatics

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