

# DD2471 Modern Database Systems and Their Applications 7.5 credits

Moderna databassystem och databastillämpningar

This is a translation of the Swedish, legally binding, course syllabus.

#### **Establishment**

# **Grading scale**

A, B, C, D, E, FX, F

## **Education cycle**

Second cycle

# Main field of study

Computer Science and Engineering

# Specific prerequisites

Single course students: 90 university credits including 45 university credits in Mathematics or Information Technology. English B, or equivalent.

## Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

### Intended learning outcomes

Upon completion of the course the students will be able to

- identify and describe different database models and their application
- give an account of the technology and theoretical foundations for modern database driven application programs
- plan and implement modern database driven application programs.

#### Course contents

Quick repetition of basic concepts in relational databases. Introduction to type theory and type systems. Introduction to functional and logical database models. Object databases. Object-relational databases. Webb database applications. Introduction to the implementation of database driven application programs. Introduction to multimedia data and indexing techniques for multimedia data. Introduction to distributed database systems. Emerging systems.

#### Course literature

To be announced at least 4 weeks before course start at course web page.

#### **Examination**

- LAB2 Laboratory Work, 4.5 credits, grading scale: P, F
- HEM2 Home Work, 3.0 credits, grading scale: P, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

If the course is discontinued, students may request to be examined during the following two academic years.

In this course all the regulations of the code of honor at the School of Computer science and Communication apply, see: http://www.kth.se/csc/student/heder-skodex/1.17237?l=en\_UK.

#### Ethical approach

• All members of a group are responsible for the group's work.

• In any assessment, every student shall honestly disclose any help received and sources used.
• In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.