

Master course (grp. 2): Databases (DB)

Om kurset

uddannelse	Computer Science / Informatik
Kurstype	forelæsning
Undervisningssprog	English
Kursus starter	02-09-2013
Kursus slutter	22-11-2013

ECTS 7.5

Eksamensform 3 hours written exam

Eksamenstidspunkt January 2014

The excellent performance: The student demonstrates

- solid knowledge, insight and overview of the subject area;
- demonstrates solid description, competent application, and critical reflection with respect to the command and application of theories and methods;
- demonstrates certainty, conceptual accuracy, and independent and clear organization with respect to structuring and communication.

The good performance: The student demonstrates

Evaluering

- knowledge of and insight into the subject area;
- demonstrates clear description and relatively competent application with respect to the command and application of theories and methods;
- demonstrates clear presentation and organization with respect to structuring and communication.

The performance meeting the minimum requirements: The student demonstrates

- sufficient however limited knowledge of the subject area;
- demonstrates a sufficient account of command and appli

forudsætninger

The recommended prerequisites are: Basic programming skills, for example obtained by completing the Introduction to Programming or by attending the CSS course in parallel. Very basic knowledge of algorithms.

Basic knowledge of Java or PHP will be helpful.

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The course introduces systems, models, languages and design involved in databases and their application. We cover also the architecture of database systems, to the extent that is necessary in order to develop efficient and effective database applications. The teaching

involves practical exercises using a fully developed database system, both for development of small applications and for isolated experiments with specific facilities and concepts.

We put an emphasis on mainstream data models with the relational data model as the most central one. We introduce to database languages and go in depth with SQL, and consider how SQL can be used from an application program. Furthermore, we introduce to database design and cover E/R-modelling as well as normalization.

We consider also some elements of graphical user interfaces (GUI) that are relevant for database applications, and introduce briefly to parts of general methods and principles for human-computer interfaces (HCI) that are relevant when con

Kursusdage Fridays at 8.30 - 12.45 a.m. in the period from September 6 - November 22 2013.

kursusform Lectures and exercises.

The purpose of this course is to give a general introduction to databases in terms of both application and foundation. More specifically, the aim is that the student should:

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- Obtain knowledge about the overall structure of database systems.
- Become familiar with the design of databases by use of special notations like E/R and analysis through normalization.
- Get an overview of the most important database models and a detailed knowledge about the most important model - the relational model as well as the language SQL.
- Get an overview of database indexing and query processing
- Obtain knowledge about application programming for database systems, including distributed databases and client/server architectures.
- Obtain knowledge about the design of graphical user interfaces to database (applications) and related aspects Human-Computer Interaction.

A student who attends the course in a satisfactory way, is expected to be able to design and implement non-trivial

Vurdering Will be announced later.

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kandidat 1. modul

STADS aktivitetskode : U22912 /

stamdata U22984

prøveform : skriftlig

bedømmelse : 7-trinsskala

censur : Ekstern censur