Design of Dynamic Web Systems 7.5 credits M7011E

Design av dynamiska webbsystem

Course syllabus admitted: Autumn 2023 Sp 1 - Present

DECISION DATE
2023-02-15

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Design av dynamiska webbsystem

Second cycle, M7011E

Education level	Grade scale	Subject	Subject group (SCB)
Second cycle	G U 3 4 5	Medieteknik	Computer Technology

Main field of study

Computer Science and Engineering

Entry requirements

Knowledge about Programming knowledge of Database Technology (for example D0018E - Database Technology 7.5 credits), Computer Communications (for examples D0002E - Computer Communications 7.5 credits) and Java applications (for example D0009E - Introduction to Programming 7.5 credits and D0010E - Object-oriented Programming and Design 7.5 credits).

Good knowledge in English equivalent to English 6.

Selection

The selection is based on 30-285 credits

Course Aim

The student should have the skills and knowledge to:

☐	Build a dynamic web system based on own and publicly available program modules.

☐	Create an application-programming interface for communication between web client and web server.

☐	With broad expertise in the field of web technology, understand the context at system level, and apply knowledge in mathematics and science for specific issues. This is shown through presenting concepts for modern techniques for client-server communication, secure handling of user information and user interface design.

☐	Have a good understanding of ethical problems related to handling of sensitive data related to individuals.

☐	Model, simulate, predict and evaluate web systems, even with limited information. This is shown through laboratory work and own developed prototype, including preparatory work and analysis of results.

Contents

The course contains an introduction to various web related technologies for creating dynamic web systems for human-computer and computer-computer interaction.

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Realization

Each course occasion´s language and form is stated and appear on the course page on Luleå University of Technology's website.

The course is conducted by students working in pairs in order to solve a number of lab assignments. The students are given freedom to choose what technologies they want to use in order to solve each assignment, and the chosen technologies are discussed during examination. Required knowledge needed is gathered via searches in literature and on the Internet. A number of lectures will be provided in order to introduce relevant technologies and current problems. Lab assignment work is documented through an online versioning system that is used continuously during the course.

Examination

If there is a decision on special educational support, in accordance with the Guideline Student's rights and obligations at Luleå University of Technology, an adapted or alternative form of examination can be provided.

Laboratory work. 7.5 hp

Unauthorized aids during exams and assessments

If a student, by using unauthorized aids, tries to mislead during an exam or when a study performance is to be assessed, disciplinary measures may be taken. The term "unauthorized aids" refers to aids that the teacher has not previously specified as permissible aids and that may assist in solving the examination task. This means that all aids not specified as permissible are prohibited. The Swedish version has interpretative precedence in the event of a conflict.

Course offered by

Department of Computer Science, Electrical and Space Engineering

Modules

Code	Description	Grade scale	Cr	Status	From period	Title
0005	Laboratory work	G U 3 4 5	7.5	Mandatory	A19	

Study guidance

Study guidance for the course is to be found in our learning platform Canvas before the course starts. Students applying for single subject courses get more information in the Welcome letter. You will find the learning platform via My LTU.

Last revised

by Robert Brännström 2023-02-15

Syllabus established

The syllabus was established by the Department of Computer Science and Electrical Engineering February 28, 2007 and is valid from Autumn semester 2007.

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