



## Course syllabus

Faculty of Technology

Department of Computer Science and Media Technology

4ME305 Webb- och mobilutveckling, 7,5 högskolepoäng

4ME305 Web and Mobile Development, 7.5 credits

**Main field of study**

Media Technology

**Subject Group**

Media Production

**Level of classification**

Second Level

**Progression**

A1N

**Date of Ratification**

Approved 2015-05-22

Revised 2019-10-03 by Faculty of Technology. Prerequisites have been changed.

The course syllabus is valid from spring semester 2020

**Prerequisites**

30 credits in G2F level in Media Technology or the equivalent.

## Objectives

The aim of this course is to provide students with the technological foundations, knowledge and skills related to different web and mobile development frameworks used for the implementation and deployment of web and mobile application and services.

Upon completion, the student should be able to:

- Have a good understanding of different methods and techniques used in the field of web and mobile engineering.
- Have a good understanding of different development frameworks for deploying web and mobile applications and services.
- Understand those aspects related to design and user requirements for developing scalable web and mobile applications and services.
- Have a deep understanding of different standards for web and mobile development
- Master and make use of different tools and development approaches for deploying web and mobile solutions

- Have an understanding of test driven development and usability aspects connected to web and mobile applications and services.

## Content

The course comprises of the following topics:

- An overview of relevant concepts and contemporary development approaches in the field of web and mobile engineering
- Requirement analysis, design and development of scalable web and mobile applications and services
- Different integration approaches and techniques for bridging web and mobile applications
- Prototype implementation and deployment of the scalable web and mobile applications in production environments.

## Type of Instruction

Lectures, seminars and workshops

## Examination

The course is assessed with the grades A, B, C, D, E, Fx or F.

The grade A constitutes the highest grade on the scale and the remaining grades follow in descending order where the grade E is the lowest grade on the scale that will result in a pass. The grade F means that the student's performance is assessed as fail (i.e. received the grade F).

Assessment in this course will be comprised of: written and/or oral examinations, assignments as well as mandatory seminar work. At the beginning of the course it will be decided on what types of assessment used.

Students who do not pass the regular examination are given the opportunity to do a reexamination shortly after the regular exam.

## Course Evaluation

During the course or in close connection to the course, a course evaluation is to be carried out. The result and analysis of the course evaluation are to be communicated to the students who have taken the course and to the students who are to participate in the course the next time it is offered. The course evaluation is carried out anonymously. The compiled report will be filed at the Faculty.

## Credit Overlap

The course cannot be included in a degree along with the following course/courses of which the content fully, or partly, corresponds to the content of this course: 4ME105 Web and Mobile Development, 7.5 credits

## Other

Grade criteria for the A–F scale are communicated to the student through a special document. The student is to be informed about the grade criteria for the course by the start of the course at the latest.

## Required Reading and Additional Study Material

### Required Reading

Casteleyn, S., Daniel, F., Dolog, P., Matera, M. (2009). *Engineering Web Applications*. Springer Dordrecht Heidelberg, London New York. 250 (363) pages

Camposato, O. (2010). *Web 2.0 Fundamentals for Developers: With AJAX, Development Tools, and Mobile Platforms*. Jones and Bartlett Publishers. 350 (751) pages

Frederick, G. (2010). *Beginning Smartphone Web Development*. Apress. 100 (350) pages

DFM, Distributed materials, 200 pages