



# ID2216 Developing Mobile Applications 7.5 credits

Utveckling av mobila tillämpningar

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

## Establishment

Course syllabus for ID2216 valid from Autumn 2008

## Grading scale

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

## Education cycle

Second cycle

## Main field of study

Information Technology, Information and Communication Technology, Computer Science and Engineering

## Specific prerequisites

Courses in network technology and courses in programming. The course requires that you can quickly learn a new programming language and create simple applications without help

## Language of instruction

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

## Intended learning outcomes

The students shall after the course be able to:

- describe the structure of mobile networks
- explain limitations of mobile networks and terminal
- explain and compare technologies used in application development
- explain service layer support for security, billing, positioning and provisioning
- identify and explain the critical issues in application requirements
- choose appropriate technology given requirements of application
- implement applications using appropriate tools

## Course contents

The course focuses on applications for cellular mobile networks and include:

- an overview of mobile networks
- wireless application protocols
- messaging infrastructure and protocols
- terminal platforms
- browser based application development
- terminal based application development
- content adaptation
- security and authentication
- content provisioning
- billing infrastructure
- positioning technology

The course has a set of lectures and seminars but much time will also be spent developing applications. The software development tools. are freely downloaded SDKs. In the seminars the students implement small mobile applications using different technologies. Students then work in smaller groups with a larger assignment. The assignment. The application should be presented in written and oral form by the end of the course.

## Course literature

Research papers, standards and programming guides related to the area of mobile applications. All material will be available on the Internet.

## Examination

- ANN1 - Assignment, 3.0 credits, grading scale: A, B, C, D, E, FX, F
- TEN1 - Examination, 4.5 credits, grading scale: A, B, C, D, E, FX, 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.

## Other requirements for final grade

The examination consists of a written examination and practical assignments. Assignments should be done and presented when scheduled. Final grade is based on the performance of the written exam and the practical assignments.

## 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.