COURSE SYLLABUS
# Android Development, 9 credits

*Android-utveckling, 9 högskolepoäng*

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|---|---|---|---|
| Course Code: | TAUN15 | Education Cycle: | First-cycle level |
| Confirmed by: | Dean Feb 9, 2015 | Disciplinary domain: | Technology (95%) and social sciences (5%) |
| Valid From: | Aug 1, 2015 | Subject group: | DT1 |
| Version: | 1 | Specialised in: | G2F |
| Reg number: | JTH 2015/605-313 | Main field of study: | Computer Engineering |

## Intended Learning Outcomes (ILO)

On completion of the course the student should:

*Knowledge and understanding*

- Display an understanding of Android architecture?

- Display an understanding of the challenges and possibilities associated with Open Source software development?

*Skills and abilities*

- Display the ability to to use the programming language Java?

- Display the ability to use the Android SDK and toolchain

- Display the ability to make use of sensor systems and GPS-functionality via Android?

- Display the ability to make use of the most common Android APIs?
- Display the ability to, when writing a business plan, correctly calculate costs, prices, investments, and realistic profitability estimates for services developed using Android

*Judgement and approach*
- Display insight into the opportunities and ethical risks associated with companies gathering and utilising personal user data, such as health data, positioning data, contact details, etc. from mobile devices.

## Contents

The purpose of the course is to give an introduction to and experience of Android programming, from start to finished and published app.
The course includes the following topics:
-Android architecture?
-Java?

-The Android SDK
-Dealing with multiple hardware configurations
-GUI development for Android?
-Sensors (gyroscope, GPS, camera)?
-Network communication in Android
-Other key APIs?
-Publishing on the Android Market
-Ethical data management
-Calculating costs, prices, investments, and profitability

## Type of instruction

The course will consist of lectures, lab work and project work.


The teaching is conducted in English.

## Prerequisites

General entry requirements and completed courses 60 credits in first cycle including completed courses Operating System Theory 6 credits, Data Structures and Algorithms 9 credits, Network Programming 6 credits, and GUI Programming 6 credits (or the equivalent) (or the equivalent).

## Examination and grades

The course is graded 5,4,3 or Fail.


Registration of examination:

| Name of the Test | Value | Grading |
|---|---|---|
| Project[1] | 7 credits | 5/4/3/U |
| Assignment 1 | 1 credit | U/G |
| Assignment 2 | 1 credit | U/G |

[1] Determines the final grade of the course, which is issued only when all course units have been passed.

## Course literature