



## COURSE SYLLABUS

# Android Development, 7.5 credits

*Android och gränssnittsdesign, 7,5 högskolepoäng*

---

<b>Course Code:</b> TAGK19	<b>Education Cycle:</b> First-cycle level
<b>Confirmed by:</b> Dean Dec 1, 2018	<b>Disciplinary domain:</b> Technology
<b>Revised by:</b> Director of Education Oct 22, 2021	<b>Subject group:</b> DT1
<b>Valid From:</b> Jan 1, 2022	<b>Specialised in:</b> GIF
<b>Version:</b> 2	<b>Main field of study:</b> Computer Engineering

---

### Intended Learning Outcomes (ILO)

On completion of the course the student should:

Knowledge and understanding

- display an understanding for the consequences of the Android technical and economical ecosystems
- display an understanding for human interface guidelines for mobile devices

Skills and abilities

- display an ability to use the Android SDK and tochain to develop high quality Android apps
- display an ability to use sensor systems using Android APIs
- display an ability to use common APIs for Android
- display an ability to employ established methods to develop user interfaces for small screens with touch input

Judgement and approach

- display an ability to evaluate the Android system architecture

### 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
- Handling different runtime configurations
- GUI development for Android
- Sensors (gyroscope, GPS, camera)
- Network communication in Android
- Other key APIs

- Publishing on the Google Play Store

### **Type of instruction**

Tuition will consist of lectures, lab work and project work.

The teaching is conducted in English.

### **Prerequisites**

General entry requirements and completed courses in Object-Oriented Software Development, 6 credits or Object-Oriented Software Design, 7,5 credits and Linear Algebra 6 credits (or the equivalent).

### **Examination and grades**

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

The final grade will only be issued after satisfactory completion of all assessments.

Registration of examination:

Name of the Test	Value	Grading
Project Work <sup>1</sup>	6 credits	5/4/3/U
Laboratory Work	1.5 credits	U/G

<sup>1</sup> Determines the final grade of the course, which is issued only when all course units have been passed.

### **Course literature**

Literature

The literature list for the course will be provided 8 weeks before the course starts.

Title: The Busy Coder's Guide to Android Development

Author: Mark L. Murphy

Publisher: CommonsWare, LLC

ISBN: 978-0-9816780-0-9