EPFL

CS-306   **Software development project**

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Cursus	Sem.	Type
Communication systems	BA6	Opt.
Computer science minor	E	Opt.
Computer science	BA6	Obl.
HES - IN	E	Obl.

Language of teaching	English
Credits	4
Session	Summer
Semester	Spring
Exam	During the semester
Workload	120h
Weeks	14
Hours	**4 weekly**
Project	4 weekly
Number of positions	

Summary

This course teaches the basics of developing real-world software, i.e., software that is large and complex, is developed by a team, evolves and needs to be maintained, and can cause serious harm if it fails. Students develop an Android app and do a lot of programming.

Content

- Problem solving for software engineers
- Development processes, in particular agile methods
- Tools (source control, project management, issue trackers, debuggers, etc.)
- Android

Learning Prerequisites

Required courses

- CS-305 Software Engineering (strict requirement, no exceptions)

Important concepts to start the course

First and foremost, students taking Software Engineering must be proficient Java programmers. Without a good prior knowledge of Java, it is very difficult to keep up with the pace of the class. Familiarity with Android development is a plus but not required.

Learning Outcomes

By the end of the course, the student must be able to:

- Design mobile apps
- Coordinate a team of developers

Transversal skills

- Plan and carry out activities in a way which makes optimal use of available time and other resources.
- Assess progress against the plan, and adapt the plan as appropriate.
- Assess one's own level of skill acquisition, and plan their on-going learning goals.

- Manage priorities.
- Take feedback (critique) and respond in an appropriate manner.

Teaching methods

Team-based project

Expected student activities

Work with team members to complete a substantial project

Assessment methods

Throughout the semester (contrôle continu).
Grade determined based on both team and individual performance in the project.

Supervision

Office hours	Yes
Assistants	Yes
Forum	Yes

Resources

Virtual desktop infrastructure (VDI)
No

Websites

- http://sweng.epfl.ch/