

## CT70A9140 Software Development Skills: Full-Stack

The official course information can be found at LUT SISU: <https://sis-lut.funidata.fi/student/courseunit/otm-80e0b561-be99-4562-aeab-913b37b8e9ea/brochure>

**Teacher in Charge:** University lecturer, D.Sc. (Tech.) Erno Vanhala

**Year:** BSc (Tech.) 2

### **Course Schedule:**

You can register for this course anytime and start doing this course as soon as the registration process is completed and you get a notification that you have been added to the course at LUT Moodle. Once you start working on the course, you can complete the course on your own pace during a 60 day period.

**Assessment scale and assessment methods:** Pass/Fail, Learning Diary 40%, Final project 60%

### **Aims:**

1. Develop practical skills for software development
2. Learn the best practices and approaches of software development
3. Develop the skilled expected in industry to work as a software developer.

### **Contents:**

This course aims give students a chance to create unique projects with a hands-on approach. The course guides students to find their interest in software engineering skills and to help each student find their desired path in software developing in the future. There are also several other Software Development Skill courses available on different topics.

The course gives the student basic understanding of full-stack development. The goal is to create a basic front- and back-end and bundle them together as a complete system.

The focus is to understand the bigger picture and how to bundle different software components together to create a working program. You will learn how to use MEAN-stack as a full stack tool bundle to create an app from scratch.

**Teaching Methods:** Self-study: Reading 14 h, practice work 20h, Project assignment 44 h, Totally 78 h.

Student must do the following to pass the course:

- Go through the given materials (series of videos) and provide a reflection in learning diary.
- Make a self-reflecting learning diary. (What you did learn and do, what problems did you face and how did you overcome them.)
- Create a similar project to the one that you've been provided with in the learning materials.
- Post everything in a Git repository and present the course work.
- Give feedback on the course (mandatory)

**Prerequisites:** To participate in this course you need to know how to program, and you should have taken a course on user interfaces, object oriented programming, and databases. At LUT students have completed the following courses, so they or similar courses provide the required background for this course: CT30A2803 User Interfaces and Usability, CT60A0203 Ohjelmoinnin perusteet, CT60A2411 Olio-ohjelmointi, and CT60A4304 Basics of Database Systems.

**Teaching Language:** English

**Study materials:** Available online in Moodle