**Software Engineering. Topics. Weeks with elements of control are highlighted.**

Week 1, 26.02: Introductory lecture.

Simple drawing with turtle

Week 2, 04.03: Models of software engineering

Advanced drawing with turtle

**Week 3, 11.03**: Python. Basic things: data structures, loops, strings

**Test**. Drawing (Lab computers; Internet off)

Week 4, 18.03: Discussing project design using string preprocessing and computation of word frequency as examples

Manipulation with string: exercises

Week 5, 25.03 (in reality, two weeks because of holidays): Team building. Analyzing texts with a spam-filter as an example

Parsing

**Week 6, 08.04:** Tricks to deal with servers (be like human, proxies, API)

**Presentation 1**

Week 7, 15.04: Back end. First chatbot

Parsing Covid data with the telegram bot

Week 8, 22.04: Defining a model: Simple statistics answering whether the first baby comes earlier.

Data processing with pandas. Visualization with matplotlib.

Week 9, 29.04: More advanced statistics (the first step to hypothesis testing). Visualization with plotly

Exercises related to parsing

**Week 10, 05.05:** Guest lecture. Cybersecurity

**Presentation 2**

Week 11, 12.05: Fitting the data with polynomials

Testing with the game: race to 100

Week 12, 19.05: Example of projects. Tic-tac-toe

**Week 13, 26.05:** Interpolating and extrapolating data. Bitcoin

**Presentation 3**

**Week 14, 02.06:** Complexity measures

**Presentation 3**

**Week 15, 09.06: Exam**