

Course Info (20 YHP)

SV21POTR Continuous Integration (YH3556004-4)

Continuous Integration

In this course, the students learn software development using continuous integration to automate integration of code and the concepts and techniques of continuous integration. The students also learn to configure and use a Continuous Integration System(Github Actions), tools and scripting languages in the field.

The course contains an introduction to CI systems, test automation and the TDD technique, and automating the workflow using gcc, Makefiles, make and Github Actions, and an introduction to programming in Python.

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Contact and communication: itslearning, Zoom, slack

You can contact the teacher from 09:00 to 16:00 all working days, Mondays to Fridays.

Lectures

Time: Weeks 46 - 49 (Mon. 09:00 - 15:00, Tue. 09:00 - 12:00 and Wed. 09:00 - 16:00)

The lectures are run on Zoom, room Software Developer VT2021 Trollhättan (3556).

The literature/materials are uploaded to itslearning before the lectures and it is important to watch/study the materials before the lectures in order to prepare yourself for the lectures.

In this course most of the lectures are followed by exercises.



Planning

Week	Contents/Lectures	Activities/Assignment/comment
46	Introduction to Python Variables and types & Basic operators String and string formatting User input, Conditions & Loops Lists, tuples, dictionaries and sets Exit codes	3 Exercises
	Introduction to Continuous Integration & TDD	No lecture on Wednesday
47	Introduction to Python Variables and types & Basic operators String and string formatting User input, Conditions & Loops Lists, tuples, dictionaries and sets Exit codes	3 Exercises
	CI Systems, Github Actions and workflows	
	GCC, Make and Makefiles	Assignment 1
48	Introduction to Python	3 Exercise
	GCC, Make and Makefiles	
49	Introduction to Python	3 Exercises
	GCC, Make and Makefiles	Assignment 2



Examination

The examination of the course is done by an individual and a team work assignments.

Grading

The criteria for G(Godkänt) and VG(Väl Godkänt) will be specified in the assignments.

Resources

1. The uploaded materials to itslearning