

# UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

## **COURSE SYLLABUS**

### **Design Lab**

2324-2-F1801Q137

#### Aims

To gain, through an experimental activity, the skills to develop software systems using agile methods.

#### Contents

Analysis, design, implementation and testing of a software system in an application domain chosen according to the interests of the student.

Use of Git according to a methodology compatible with agile methods.

Application of agile methods, and Scrum in particular.

The activity is performed under the supervision of the teachers.

#### **Detailed program**

The program consists of lectures about Git, agile methods and Scrum and extensive experimental activities organized according to the Scrum methodology.

Lectures:

- Use of Git and Trello
- Agile methods
- Writing User Stories

- Scrum
- Test Automation

Laboratory:

- performing two agile iterations, following Scrum rituals and practices
- meetings at the end of each iteration (demonstration to stakeholder and technical meetings)

#### **Prerequisites**

General knowledge and expertise about programming, software architectures and software engineering. Specific knowledge related to the application domain chosen by the student.

#### **Teaching form**

Some lectures given initialy. It follows presentations and discussion of the projects developed by the students, through all the phases of the development cycle. The course is taught in Italian.

During covid-19 emergency, the lectures will be both online and recorded.

#### Textbook and teaching resource

Online recorded lectures, articles and books. In addition, material selected by each group together with the teachers according to the specific application domain.

#### Semester

This course is available in the 2nd semester

#### Assessment method

The assessment method consists of a project and meetings performed at the end of each iteration (oral exams) to assess the sound and correct application of agile methods.

During covid-19 emergency, the meetings will be performed online.

**Office hours** 

On appointment.

### Sustainable Development Goals