

### UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

#### **SYLLABUS DEL CORSO**

# Advanced Experimental Testing and Monitoring on Geomaterials (Laboratory and In Situ) (Curricular - Geology)

2122-94R-SCGA23

#### **Title**

Advanced experimental testing and monitoring on geomaterials

#### Teacher(s)

Riccardo Castellanza

#### Language

**English** 

#### **Short description**

The aims of this course are: i) provide a specific knowledge and training on advanced experimental testing method for geomaterials (both in laboratory and in situ); ii) provide a specific background of recent monitoring methods for geo-structures or protective defense. The course is focused on the definition of geo-mechanical, hydrogeological and chemical behaviour of soils and rocks. The specific requests of the PhD students attending the course will be considered.

The course is subdivided in 4 parts:

- 1) experimental apparatus, sensors, datalogger and controller unit for testing geomaterials.
- 2) advanced laboratory tests on soil and rocks for idro-chemo-mechanical characterization
- 3) in situ testing overview of recent and innovative devices
- 4) monitoring of the main physical variables with the most recent devices

**Evaluation: YES** 

## CFU / Hours

2 CFU - 20 Hours (8h lecture - 12h laboratory training)

#### **Teaching period**

I semester