

# UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

# SYLLABUS DEL CORSO

# **Advanced Experimental Testing and Monitoring on Geomaterials**

2425-1-124R031

### Titolo

\*\*Advanced Experimental Testing and Monitoring on Geomaterials

## Docente(i)

Riccardo Castellanza ; Gian Battista Crosta

#### Lingua

English

## **Breve descrizione**

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 hydro-chemo-mechanical characterization including ground improvement;

(3) in situ testing overview of recent and innovative devices;

- (4) monitoring of the main physical variables with the most recent devices;
- (5) rheological characterization of solid-liquid mixtures.

Evaluation: YES

#### CFU / Ore

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

#### Periodo di erogazione

**II** Semester

**Sustainable Development Goals**