

# UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

# **SYLLABUS DEL CORSO**

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

2324-1-124R031

#### **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**