UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Advanced Experimental Testing and Monitoring on Geomaterials

2425-1-124R031

Title

**Advanced Experimental Testing and Monitoring on Geomaterials
**

Teacher(s)

Riccardo Castellanza ; Gian Battista Crosta

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 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 / Hours

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

Teaching period

II Semester

Sustainable Development Goals