

## UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

#### **COURSE SYLLABUS**

# Earth Observation Data for Environmental Monitoring (Intercurricular)

2021-94R-SCGA02

#### **Title**

Earth Observation data for environmental monitoring

#### Teacher(s)

Micol Rossini; Biagio Di Mauro

#### Language

English

#### **Short description**

The aim of the course is to provide expertise in Earth Observation (EO) and monitoring. The course will be structured as follows:

Lecture I: Basic concepts of optical remote sensing: physical principles, digital images

Lecture II: Availability of Earth Observation data (in particular ESA-Sentinels): presentation of different satellite missions and their potential applications

Lecture III & IV & hands-on exercises: two Earth Observation applications according to PhD needs and requests (e.g. hydrological and cryospheric applications; land surface and ecological applications) followed by corresponding hands-on exercises.

Suggested years of attendance: I and II

Expected outcome: introduction of EO data-based approaches in the students own PhD projects

Evaluation: YES - with a final oral presentation

#### **CFU / Hours**

2 CFU - 16 Hours (Lecture)

### **Teaching period**

June 2021