



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## SYLLABUS DEL CORSO

### Machine Learning for Multivariate Data Analysis (Intercurricular)

2223-94R-SCGA07

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#### Title

Machine Learning for Multivariate Data Analysis

#### Teacher(s)

Davide Ballabio

#### Language

English

#### Short description

The course will introduce principles and theory of the main multivariate modelling and machine learning approaches. These can be useful for exploratory analysis, i.e. to find and visualise main patterns in complex data systems (Principal Component Analysis), as well as to relate a set of independent variables to a modelled qualitative or quantitative response (Support Vector Machines and Partial Least Squares). Theory lessons will be supported with guided exercises and practical sessions on real data as case studies. Practical sessions will be based on available MATLAB statistical toolboxes for multivariate data analysis.

Evaluation: NO

### **CFU / Hours**

2 CFU - 16 Hours (Lecture)

### **Teaching period**

II semester

### **Sustainable Development Goals**

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