

# UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

# **COURSE SYLLABUS**

# Medical Statistics for Clinical Research: Advanced Topics

2425-5-H4101D352

### **Aims**

The aim of the course is to provide students with an introduction to the use of Artificial Intelligence techniques, in particular machine learning, in medicine.

#### **Contents**

Machine learning methods with several examples

## **Detailed program**

- 1. Introduction to Artificial Intelligence
- 2. From Statistics to Machine Learning
- 3. Supervised and Unsupervised learning: classification and clustering methods
- 4. Applications to big data in healthcare
- 5. Applications to proteomics
- 6. Applications to genetics
- 7. Applications to imaging

## **Prerequisites**

from the 5th year of Course

Dentistry from year V and Specialist Nursing and Midwifery year II	Dentistry	from	vear V	and S	pecialist	Nursina	and	Midwifer	v vear II
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# **Teaching form**

Lessons will be provided in presence (lectures)

# Textbook and teaching resource

The teaching resourse will be indicated at the beginning of the course

### Semester

Second semester, March

### **Assessment method**

Interactive verification at the course conclusion in order to ensure the learning of the take-home messages.

## Office hours

By appointment paola.rebora@unimib.it

## **Sustainable Development Goals**

GOOD HEALTH AND WELL-BEING | QUALITY EDUCATION