



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## SYLLABUS DEL CORSO

### Interazione Tra Medicina e Ingegneria Biomedica in Diagnosi e Terapia

2122-3-H4101D319

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#### Aims

The meaning of this course is to sensitize the attention of future doctors to scientific and technological innovation, this responds to the fundamental criterion that the development of knowledge and the improvement of medical practice is inextricably linked to the training of young doctors

#### Contents

Presentation of selected topics to illustrate the importance of the contribution of biomedical engineering in the clinical context. Through the interdisciplinary collaboration between medical engineers and biologists (physiology), the methodologies and technologies of Biomedical Engineering it is possible to describe, understand and, to a large extent, solve the problems of medical-biological interest. Providing usable tools in diagnostics and therapy.

#### Detailed program

- 1) ECG
- 2) MEDICINE IMAGING
- 3) 3D RECONSTRUCTION (scanner - bioprinters)
- 4) BIOSENSORS

5) NEW FRONTIERS.

### **Prerequisites**

The course is intended for students at the third year of the Master course

### **Teaching form**

Lessons will be provided in presence, subject to any ministerial changes following the COVID pandemic situation

### **Textbook and teaching resource**

Introduzione all'ingegneria biomedica (E. Biondi, 1997)

### **Semester**

Second semester, March

### **Assessment method**

Self assessment test

### **Office hours**

By appointment, arranged by e-mail

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