



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## SYLLABUS DEL CORSO

### Prosthesis and Rehabilitation

2425-3-H4102D055-H4102D061M

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#### Aims

To assist professionals in their routine related to engineering activities related to prosthesis. In particular the following activities will be shown: 3D scanning of prosthesis components or of anatomical districts, design with commercial and ad-hoc 3D software tools and manufacturing by means of additive technologies.

#### Contents

The course aims at providing the students with the practical expertise on engineering-based activities relevant for prosthesis design and manufacturing.

#### Detailed program

3D scanning of prosthesis components, such as for knee or shoulder replacement. 3D scanning of anatomical districts to gather patients shape and dimensions. Prosthesis design (internal and external) with commercial and ad-hoc 3D software tools. Manufacturing process by means of additive technologies starting from 3D captured data.

#### Prerequisites

Basic knowledge of anatomy and prosthetics

## **Teaching form**

Examples of use of devices and software solutions for motion analysis.

## **Textbook and teaching resource**

Course Handout (slides)

## **Semester**

First semester

## **Assessment method**

the skills being acquired are evaluated during the activities

## **Office hours**

Monday, from 11:00 a.m. to 1:00 p.m.

## **Sustainable Development Goals**

QUALITY EDUCATION | INDUSTRY, INNOVATION AND INFRASTRUCTURE | RESPONSIBLE CONSUMPTION  
AND PRODUCTION | PARTNERSHIPS FOR THE GOALS

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