



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## COURSE SYLLABUS

### Basis of Signal Processing

2425-1-I0303D040-I0303D086M

---

#### Aims

Students will learn the basics of signal processing required for their profession.

#### Contents

At the end of the course the student should have acquired the basic notions of signal processing.

#### Detailed program

The basics of signal processing course offers students an overview of the fundamental principles for analyzing and manipulating signals of different natures. Essential concepts such as time and frequency domain representation, signal transforms, sampling and quantization, filtering, and practical applications are explored. This course provides a theoretical and practical foundation in signal processing, allowing students to acquire transferable skills in multiple fields, such as communications, acoustics, imaging and much more.

#### Prerequisites

Good mathematical knowledge.

**Teaching form**

8 lessons of 2 hours carried out in attendance (both frontal and interactive modality)

**Textbook and teaching resource**

Slides and teaching materials provided by the instructor.

**Semester**

First semester.

**Assessment method**

16 multiple choice questions on Basics of Signal Processing to check preparation on the exam programme.

**Office hours**

By appointment requested via e-mail.

**Sustainable Development Goals**

QUALITY EDUCATION

---