

POLITECNICO MILANO 1863

A close-up photograph of a person's hand holding a small, rectangular electronic circuit board. The board is populated with various components, including a microphone and a cable. The background is a blurred blue sky. The image is partially obscured by a black text box at the bottom.

Laurea Magistrale (MSc) in
**Computer Science and
Engineering – Track in Musical Acoustics**

Milano Leonardo Campus

www.polinternational.polimi.it

Presentation

The Master of Science programme in Computer Science and Engineering includes a new track entirely devoted to Audio and Musical Acoustics. Audio and acoustic technologies are evolving faster than ever, as new and exciting technological solutions and advanced applications emerge, which allow us to swiftly retrieve musical information from audio streams and to personalize audio content. New design methodologies are emerging for customizing musical instruments and listening space. In order to learn how to effectively face this technological evolution, various forms of expertise need to be combined. The designers of these Technologies, in fact, are information engineers with targeted expertise on audio signal processing, as well as on acoustics and machine intelligence.

With this challenge in mind, the students of this programme will attend the first year on the Milano Leonardo Campus, where courses devoted to computer engineering, computer music, and audio signal processing are offered. The second year will be offered in the Cremona Campus, will focus on musical acoustics, vibro-acoustics and room acoustics. In Cremona, students will also be able to attend courses of the School of Musicology of the University of Pavia.

Eligible students

Students with Bachelor degree in a related field are eligible for application. Preference is accorded to graduates in Information Technology, in Computer Science, and in Computer Engineering.

Subjects

Key subjects of the first year:

Multimedia Signal Processing, Sound Analysis, Synthesis and Processing and Computer Music.

Key subjects of the second year:

Vibro-acoustics, Room acoustics, Musical acoustics

Fees

For **EU students** fees are based on students' family income and on the presented study plan. They range from about €900 to €3,500 per year. For **Non-EU students** fees amount to about €3,500 per year.