



MASTER'S DEGREE in Acoustics

Master accredited by the French Ministry of Higher Education and Research with possibilities to continue for a PhD.

2 : year Master program backed by
: four internationally recognized
: engineering schools.

8 : research laboratories of **Université de Lyon**
: and **CeLyA**, an alliance of the main research
: teams working in acoustics in Lyon :
: LMFA : LTDS : CREATIS : LGCB
: LVA : LabTAU : CRNL : LAE

Initial and continuous training

Objectives

- ▶ To train in various recent fields of Acoustics.
- ▶ To be able to join a R&D department of a company or to continue with a PhD thesis carried out in a research laboratory or in collaboration with an industry.



Training course recognized by major industrial companies, consultants and research laboratories.

Prerequisites

- ▶ Bachelor degree (or equivalent) in Science or Engineering.
- ▶ Certified B1 level in English (CEFRL).

Scientific fields

- ▶ Engineering Acoustics : Aeroacoustics, Vibro-acoustics, Building Acoustics and Non-Destructive Evaluation.
- ▶ Application of Ultrasound in Medicine.
- ▶ Sound Perception.



The **"Centre Lyonnais d'Acoustique"**, CeLyA, has been funded in 2011 as a "Laboratoire d'Excellence" by the French Ministry of Research.

An international jury has selected a total of **170 projects** in all disciplines, from Pure Mathematics to Social Sciences. CeLyA was awarded a total financial support of **6M€ for a period of 10 years** (600k€/year).

CeLyA is **the only LabEx devoted entirely to Acoustics.**





Key points of the ACOUSTICS program

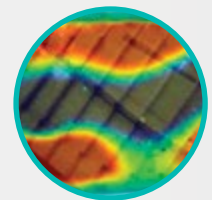
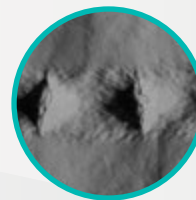
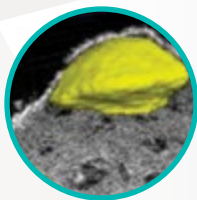
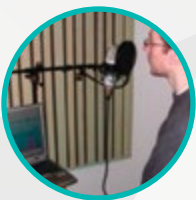
International program open to students from France and from abroad.

- ▶ A significant part of the training promotes the gradual acquisition of **scientific communication in English**, especially in offering high-level scientific lectures in English with worldwide internship opportunities.
- ▶ Numerous **elective and specialized courses** during the second year, with support from the research teams of the **Centre Lyonnais d'Acoustique (CelyA)**, and links between laboratories and industrial partners.

Master's degree in Acoustics

S 1	Sound and Acoustic Propagation	Signal and Speech Processing	Fundamentals of Mechanics	Continuum Mechanics	Language French English	Mgmt Project & Comm
S 2	Acoustic Modelling (Numerics, Project)	Vibrations	To go beyond : Musical Acoustics, Structures, Image Signal Processing, Adaptive Filtering...		Language French English	Internship in Lab
S 3	Advanced Acoustics	Specialization in Aeroacoustics, Sound Perception, Building Acoustics, Vibroacoustics...		Applications to Environmental Issues, Transportation...	General Course	Language French English Mgmt Project & Comm
S 4	Research Internship in a laboratory or in a R&D department (industry)					

- ▶ **Research training** with more than one semester of internship (in a research laboratory or a R&D department in industry, in France or abroad), and two training periods to be performed in a partner laboratory.
- ▶ Lyon is an **international reference** in the field of Acoustics covered by the Master. The associated laboratories skilfully combine fundamental research with industrial applications and weaved a large international network with other academic or non-academic research partners and with leading high-tech industries. Furthermore, students can select courses from all the institutions involved in this program, which offers a wide range of elective courses.



Contacts

Program managers

Pr. Christophe Bailly (ECL)

Pr. Jean-Christophe Bera (Polytech)

Pr. Etienne Parizet (INSA)

Dr. Catherine Marquis-Favre (ENTPE)

Management of applications
: scolarite.registration@listes.ec-lyon.fr

More information :
: <http://master-acoustics.ec-lyon.fr>

