

# Master of Science in Acoustics

http://master-acoustics.ec-lyon.fr/





#### MSc in Acoustics ...

### ... A comprehensive and varied program

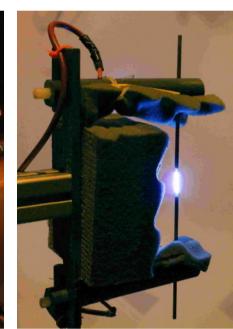
The Master's degree in Acoustics offers training in many areas of acoustics such as sound perception and sound quality, medical ultrasound, aeroacoustics, vibroacoustics, notably with application to air and ground transportation systems.

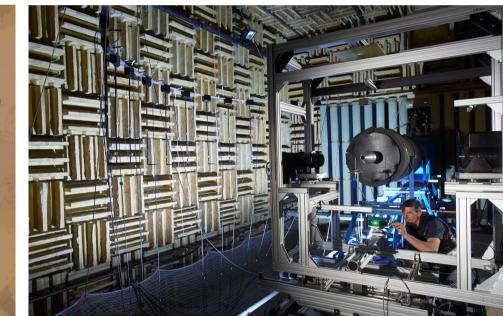
The training is based on theoretical, numerical and experimental approaches, including projects conducted in our partner research laboratories, and a semester-long intership in an academic laboratory or in a research and development (R&D) unit in industry.

After graduation, this program allows students to join a R&D department in industry (transportation, energy, building, health), to work as a consultant in acoustics, vibration, aeroacoustics or medical systems, or to continue with a PhD thesis carried out in a research laboratory or in collaboration with an industrial partner.









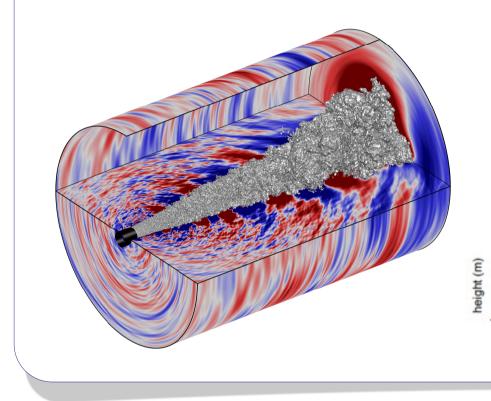
# M2 year as part of your engineering cursus

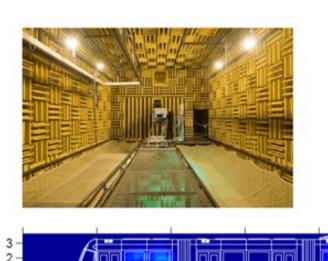
#### (dual program)

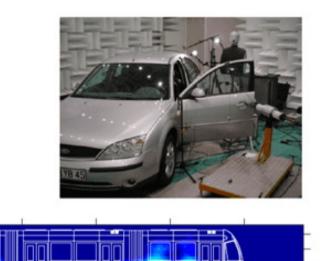
The engineering students from Ecole Centrale de Lyon, Polytech-Lyon, INSA-Lyon and ENTPE may directly apply for the second year of the program as part of their engineering cursus (dual degree).

Candidates with a Master of Science (or at least with a M1) in Mechanics, Physics and Mechanical engineering as well as engineering students can also apply directly for the second year of the program.

You can choose almost all your courses according to your professional project, e.g. in Aeroacoustics, Engineering noise, Vibration, Ultrasound.



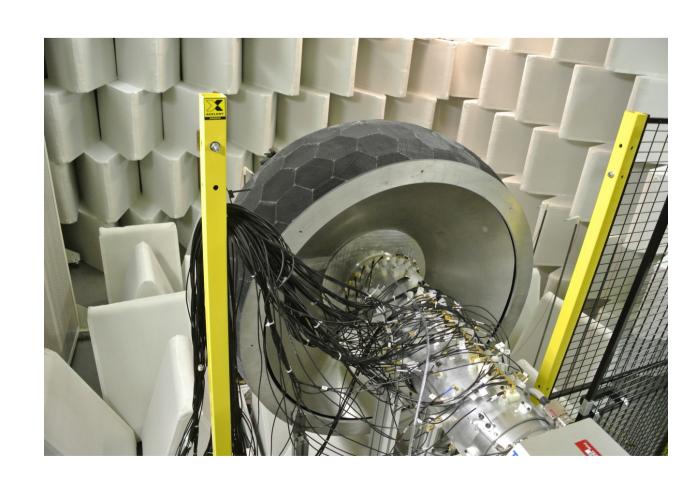




### A tailor-made course program suited for your professional project - Some examples for the M2 year

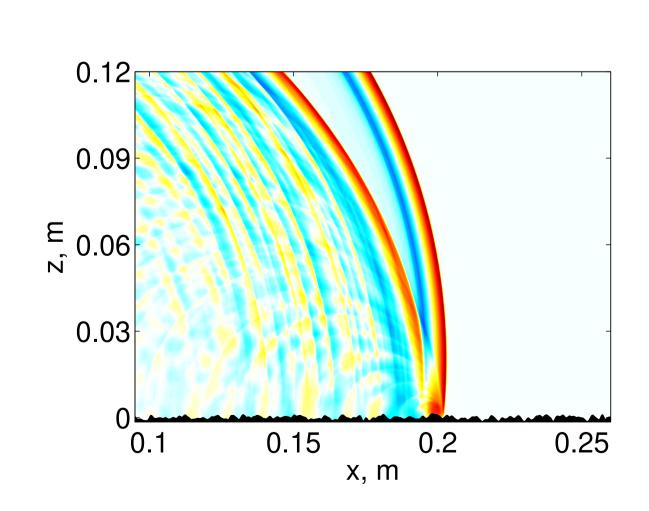
#### **Aeroacoustics**

Advanced acoustics • Aeroacoustics • Active control of noise and vibrations • Transportation noise • Fluid structure interactions • Physics of turbulent flows • Numerical simulation of flows



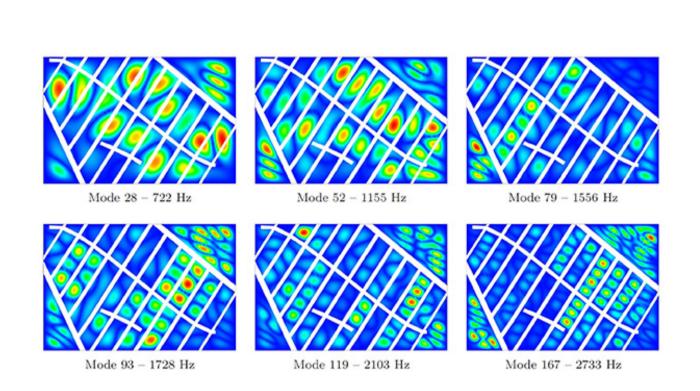
# **Engineering acoustics**

Advanced acoustics • Environmental acoustics • Building acoustics • Sound perception • Transportation noise • Fluid - structure interactions • Numerical methods for acoustics



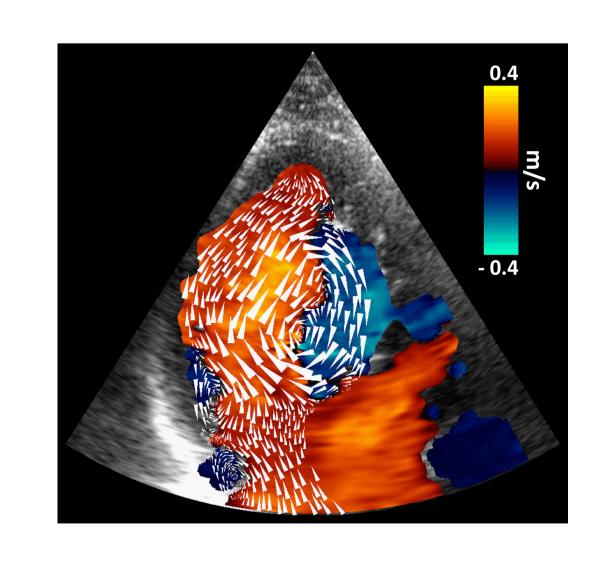
#### Vibration

Advanced acoustics • Active control • Transportation noise Propagation of elastic waves Introduction to nonlinear vibrations • Sound structure radiation • Fluid - structure interactions



#### **Ultrasound**

Advanced acoustics • Sound perception • Ultrasound imaging • Environmental acoustics • Ultrasound applications • Numerical methods for acoustics • Active control of noise and vibrations



Contact: scolarite.registration@listes.ec-lyon.fr







