

## Equipments Acoustics

 **ECTS**  
4 credits

 **Component**  
INSTITUT  
NATIONAL  
DES SCIENCES  
APPLIQUEES  
TOULOUSE

 **Number of  
hours**  
48h

### Presentation

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### Description

Programme (detailed contents):

Diffuse field, direct field

Different sound absorbers

Determination of absorption coefficient

Auditorium acoustics

Acoustic power of building services

Design methods

### Objectives

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At the end of this module, the student will have understood and be able to explain (main concepts):

- Diffusion of sound waves inside and outside rooms
- Transfer of acoustic waves along ductworks
- Transfer of vibrations generated by building services

The student will be able to:

- Calculate walls absorption to restrict noise dose absorption by workers
- Reduce noise propagation in ducts
- Define noise proof walls to protect the surrounding
- Size vibration pads

### Pre-requisites

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Indoor building physics

### Useful info

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### Place

> Toulouse