

Indoor building physics



ECTS
4 crédits



Hourly volume
65h

Introducing

Description

Objectives

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

- useful criteria to qualify comfort;
- basic knowledge for designing a system of heating, ventilating and air conditioning (HVAC);
- to be sensitized to energy saving in HVAC systems and to thermal code RT;
- basic knowledge to treat the sound insulation of buildings.

The student will be able to:

- To design a simple installation of heating and air conditioning;

- To analyze the operation of the elements of an air conditioning and heating installation;

- To calculate the sound insulation of a wall, the time of reverberation of a room and to propose a treatment;

- To calculate the direct and reverberated acoustic fields;

- To enrich a numerical model.

Expected skills :

design a basic HVAC installationanalyze the operation of the elements of a heating and air conditioning system ;calculate the sound insulation of a wall , the reverberation time of a room and offer treatment

Necessary prerequisites

Heat transfer and Fluid Mechanics I & II

Évaluation

L'évaluation des acquis d'apprentissage est réalisée en continu tout le long du semestre. En fonction des enseignements, elle peut prendre différentes formes : examen écrit, oral, compte-rendu, rapport écrit, évaluation par les pairs...

Practical info

Location(s)

 Toulouse