

Eco building & Environmental impact



ECTS
5 crédits



Hourly volume
60h

Introducing

Description

Objectives

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

- Interest and principles being used to establish a diagnosis of energetic performance (DPE).
- Interest and the principle of a thermal dynamic simulation for buildings to help with the design - renovating of the buildings in a bioclimatic approach
- Interest and principles of methods to evaluate global environmental impacts in a project of new or renovated building: life cycle analysis (LCA), Bilan Carbone and other methods.

The student will be able to:

- carry out the DPE and the thermal dynamic simulation of a project of building, analyze results obtained and propose improvements with the studied project

- analyze and take into account a study report on the environmental impacts of a project

- carry out a simplified LCA to study a building

Expected skills :

To optimize a building according to bioclimatic principles, using a dynamic thermal simulation software To assess the environmental impact of a building (or part of a building) via LCA and / or a Carbon Footprint analyze.

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