City and its sustainable development

VILLE ET AMÉNAGEMENT DURABLE

CITY AND ITS SUSTAINABLE DEVELOPMENT

Lecturers:

| Lecturers : 0.0 | TC : 0.0 | PW : 0.0 | Autonomy : 0.0 | Study : 0.0 | Project : 0.0 | Language : FR

Objectives

Keywords :

Programme

Learning outcomes

Independent study

Objectifs :

Méhodes :

Core texts

Assessment

CLIMATOLOGIE URBAINE

URBAN CLIMATE

Lecturers: **Pietro SALIZZONI**

| Lecturers : 15 | TC : 0.0 | PW : 0.0 | Autonomy : 0.0 | Study : 10 | Project : 0.0 | Language : MI

Objectives

The density of buildings and the construction materials used deeply alter the exchange of heat, humidity and momentum in the urban canopy, compared to a rural environment. These modifications induce very specific thermal and microclimatic conditions, which can in turn have a profound influence on the comfort of life. This module presents the issues associated with building architecture and urban planning to minimise the climate impact of urban areas, minimise the energy consumption of buildings and maximise the comfort of urban spaces.

Keywords :

Programme

Thermal comfort of urban spaces CM 11h + BE 6h
Natural ventilation of buildings: CM 4h + BE 4h
(4h CMs are shared with the HD Stream - Air Renewal)

Learning outcomes

Independent study

Objectifs : This activity is not concerned with framed autonomy activities outside personal work.

Méhodes : This activity is not concerned with framed autonomy activities outside personal work.

Core texts

Assessment

RÉGÉNÉRATION ET RÉSILIENCE URBAINE

REGENERATION AND URBAN RESILIENCE

Lecturers: Pietro SALIZZONI

| Lecturers : 17 | TC : 0.0 | PW : 0.0 | Autonomy : 0.0 | Study : 8.0 | Project : 0.0 | Language : MI

Objectives

Conditional on the approval of the CE

Provide an overview of the issues associated with the transformation, conversion and regeneration of urban spaces to take account of the challenges arising from climate change and the need for sustainable development.

Keywords :

Programme

Urban hydrology CM 8h + BE 4h

Soil depollution and reclamation CM4h + BE4h

The political, sociological and economic issues involved in urban regeneration CM 5h

Learning outcomes

Independent study

Objectifs : This activity is not concerned with framed autonomy activities outside personal work.

Méhodes : This activity is not concerned with framed autonomy activities outside personal work.

Core texts

Assessment

Written exam: 50%
Project reports: 50%

PROJET TET

SOIL POLLUTION

Lecturers: **Eric VINCENS, Pietro SALIZZONI**

| Lecturers : 16.0 | TC : 0.0 | PW : 4.0 | Autonomy : 0.0 | Study : 4.0 | Project : 0.0 | Language : FR

Objectives

The project is common to the three components of the "Option". It is based on the final project of the students's diploma from the National School of Architecture of Lyon belonging to the departement "Collaborative experimentation in architecture". Through this interdisciplinary work between student-architects and student-engineers, the goal is to get engineering students to invest in a reflection on economically viable solutions, adapted to a Post-Carbon Society taking into account the scarcity of resources, the necessary energy frugality in a regenerated city.

Keywords : home comfort, structures, foundation engineering, acoustics, LCA, circular economy

Programme

Learning outcomes

Independent study

Objectifs : This activity is not concerned with framed autonomy activities outside personal work.

Méhodes : This activity is not concerned with framed autonomy activities outside personal work.

Core texts

Assessment