



OPTION «DESIGN PROCESS»

STUDY AND EXPERIMENT OF ARCHITECTURAL DESIGN PROCESS

THÉMATIQUE DU MODULE

OUR CONTRIBUTION TO THE EDUCATIONAL PROFILE

Design a project to experiment and be innovative by performing an installation including the integration of human, technical and economic constraints of the design project.

Develop a reflexive attitude enriching the theories and practices of architecture: master and integrate the technical and human sciences dealing with the process of architectural design, manufacture, and transmit a design expertise, problematize a research question around the process.

Build as an architect ethical and responsible practice: consider architecture as a cultural discipline constantly renewed, in constant touch with developments of artistic and social practices.

Interact with all the actors involved in the issues of space and architecture: Foster experimentation and creativity; communicate in a clear and structured way for experienced or not public, the architectural design process tracking and its spatial production.

ENONCÉ(S) POUR CE QUADRI

STATEMENT FOR THIS SEMESTER : PAPER AND WOOD IN LIGHT

OBJECTIFS DU MODULE ET COMPETENCES VISEES

OBJECTIVES OF THE COURSE AND ACQUIRED SPECIFIC LEARNING *

This selection aims to highlight the elements of the design process, to become aware of multiple implications on his architectural production. This one enlarges the approach of the architectural program and thus the student's' creative potential, firstly by developing his observation knowledge and cognitive abilities, and secondly, by approaching the experimental research focused on the study of the design process.

SPECIFIC OBJECTIVES

Observe, analyze and assess the design process;

Assess the potential of a material and a design element;

Understanding the stakes of the architectural design process;

Use several manufacturing techniques, such as digital design (CAD, 3-D printing, laser cutting);

Design an installation;

Present in English a design process and its production orally and in writing (poster, book).

METHODOLOGIE METHODOLOGY

Lectures, articles, interactive pedagogy with student participation.

CRITERES D'EVALUATION

LEARNING OUTCOMES

- After submitting a book about the design process, students will be able to critically assess the design process and understand its stakes.
- After making a box with the choice on a material and a design element, students will be able to find references to argue their assessment about it.
- After integrating digital design in the installation, students will be able to use manufacturing techniques.
- After producing an installation, students will be able to design it by taking in to consideration human, financial and technical constraints.
- After interacting in class, students will be able to present a design process and its production orally and writing in English.

ENSEIGNANTS TEACHERS AND LECTURERS

Prof. ir. Geneviève Martin genevieve.martin@ulb.ac.be

- Teacher in Mechanic, Building's structure and equipment since 1992 at Victor Horta Architecture School
- Researcher in Architectural Design Process
- Cognitive Sciences, Faculty of Psychology and Education Sciences, ULB-ULg
- Civil Engineer in Mechanic and Electricity (Fluid Mechanics), ULB

Ir. Fiorenzo Namèche <http://www.light-to-light.com/>

- Owner of the "Light to Light" Company
- Lighting Designer

Prof. Dr. Arch. Marc Crunelle <http://www.spatialogie.net/>

- Researcher in architectural perception,
- Doctor in Space Psychology
- Teacher at Victor Horta Architecture School
- Architect, sculptor, carpenter, joiner

Anne-Sophie Daout

- Head of Archives and the Architecture Library, ULB
- Art Historian

Arch. David Erkan david.erkant@ulb.ac.be

- Assistant professor at the ULB Faculty of Architecture
- Guest critic at the Special School of Architecture in Paris, at the AA School of London Southbank University of London, and the School of Architecture Lund, Sweden
- co-founder of DEAtelier
- Master of Digital Architecture, London
- Graduate architect and practitioner, Brussels

REFERENCES, BIBLIOGRAPHIE ET LECTURES RECOMMANDEES

REFERENCES AND RECOMMENDED READING

Garcia M., The Patterns of Architecture: Architectural Design, Wiley Architectural Design, 2010.

Sakamoto Tomoko Ferré A., From Control to Design: Parametric/Algorithmic Architecture, Actar-D, 2008.

Prost R., Conception Architecturale : une investigation méthodologique, Villes et Entreprises, Editions L'Harmattan, 1992.

Heylighen A. & Martin G. "That Elusive Concept of Concept in Architecture", MIT, Cambridge MA, USA - Prix de la meilleure communication de DCC'04 - Design Computing & Cognition.

Heylighen A. & Martin G., "Chasing Concepts During Design", in AIEDAM - Artificial Intelligence for Engineering Design, Analysis and Manufacturing, Cambridge University Press, 2005, USA.