UCLouvain

## lbarc1346

2023

## Designing with light

3.00 credits	30.0 h	Q2

Teacher(s)	Capron Jean-Luc;				
Language :	French				
Place of the course	Bruxelles Saint-Gilles				
Main themes	This course aims to train future architects in strategies and design tools integrating the space-light dimension; more specifically this module develops the relationship between space and light, both natural and artificial.  Projecting spaces with light is based on an analytical approach, integrating the sensitive dimension: establishing "light strategies" materialized by "light effects" and generated by "light mechanisms".  Understanding the link between space and light implies understanding its sensitive and poetic dimension, through theoretical input, in situ observations and life-size experiments.				
	Objectifying any project with light requires mastery of computer lighting software: from the insertion of photometric data to the reading and interpretation of results, and the expression of the atmosphere obtained through synthetic images.  At the end of the course, students will be able to design spaces, both indoor and outdoor, integrating light and to draw up lighting plans for environments built on the basis of spatial perceptions and the way these places are used.				
Learning outcomes	At the end of this learning unit, the student is able to:  By the end of this session, students will be able to develop and integrate the following skills:  Integrate diverse approaches to exchange and nourish architectural reflection.  Adopt approaches for their projects that are methodical, creative, metaphorical, perceptive, collaborative.  Imagine levers capable of transforming an understanding of reality.  Experiment with the possibilities of transforming a context.  State and prioritize intentions in order to make project choices.  Experiment and use appropriate means of communication according to the objectives pursued.				
Bibliography	La bibliographie complète est accessible sur Moodle.  Decuypere, Justine; Capron, Jean-Luc; Dutoit, Thierry; Renglet, Michel. Mesopic Contrast Measured with a Computational Model of the Retina. In: Proceedings of CIE Centenary Conference "Towards a New Century of Light" Commission internationale de l'éclairage (CIE): Vienna, 2013, p. 98-103.  Thiry, Jean-Denis; Capron, Jean-Luc. "Mécanismes-lumière": Le cas des bibliothèques d'Alvar Aalto. In: Lieuxdits no. 4, p. 11-16 (décembre 2012).				
	Capron, Jean-Luc. Impact of the Interaction between Colour, Light and Vision on the Perception of Spatial Boundaries 8th Color Conference, Bologna, 2012.  Decuypere, Justine; Capron, Jean-Luc; Dutoit, Thierry; Renglet, Michel. Influence of Material Spectral Reflectance on Vision in Mesopic conditions. In: Proceedings of CIE Expert Symposium on Spectral and Imaging Methods fo Photometry and Radiometry, Commission internationale de l'éclairage: Bern, 2010. 978-3-901906-89-3, p. 46-47.  Capron, Jean-Luc. Lumière et environnement construit. In: Architecture UCLouvain - St-Luc Architecture - Site de Bruxelles, UCLouvain - St-Luc Architecture - Site de Bruxelles; Bruxelles, 2010, p. 68.  Capron, Jean-Luc. Pour une nouvelle approche de l'éclairage architectural. In: Architecture UCLouvain - St-Luc Architecture - Site de Bruxelles; Bruxelles; Bruxelles, 2010, p. 66-67.				
Other infos	The course is English friendly.				
Faculty or entity in charge	LOCI				

Programmes containing this learning unit (UE)						
Program title	Acronym	Credits	Prerequisite	Learning outcomes		
Bachelor in Architecture (Bruxelles)	ARCB1BA	3		٩		
Bachelor in Architecture (Tournai)	ARCT1BA	3		٩		