UCLouvain

larcb2054

2026

The Comfort Project: Histories and Building Services

3.00 credits	30.0 h	Q1

Teacher(s)	Marino Giulia ;
Language :	French
Place of the course	Bruxelles Saint-Gilles
Main themes	The course aims to re-establish the centrality of physiological comfort in architecture by exploring the cultural reasons and material implications of integrating active and passive systems into design projects. Through an interdisciplinary approach that bridges sensory and material considerations, the course examines the role of comfort and energy throughout architectural history—from ancient bioclimatic strategies to the integration of technical systems in the 19th and 20th centuries. Historical tools—ranging from the history of architecture and construction to the evolution of sensibilities—are employed to critically analyze today's built heritage and contemporary paradigms for its preservation.
Learning outcomes	**At the end of this learning unit, the student is able to :** • Recognize the significance of physiological comfort in the history of architecture, • Articulate the implications of climate and energy considerations in shaping architectural projects, • Analyze and discuss the evolution and contemporary role of comfort building services in architecture, focusing on the interplay between conservative (passive systems) and regenerative (active systems) techniques, • Evaluate and critique the material, constructive, formal, and spatial impacts of integrating comfort systems into architectural design. **General Learning Outcomes** In line with the program's learning outcomes (LOs), this course contributes to the development and acquisition of the following LOs: • LO2.5 Inventively represent a creative process. • LO2.6 Proficiently depict environmental, social, and economic phenomena. • LO4.3 Understand and integrate the content of other artistic or scientific disciplines to enrich the architectural project. • LO4.4 Understand and assess the environmental, social, and economic consequences of architectural choices. • LO6.1 Acquire and rigorously apply disciplinary, interdisciplinary, or transdisciplinary methods of scientific research.
Evaluation methods	Individual or group work. The dissertation must be submitted and presented during the oral examination. If generative artificial intelligence (AI) is used, it must be handled responsibly and in line with academic and scientific integrity practices. Anyone using generative AI in a way that does not align with the uses outlined in the teaching unit description is engaging in conduct that constitutes an irregularity under Article 107 of the RGEE (non-personal student production in an assessment context).
Teaching methods	Lectures, guest experts.
Content	While the 'construction revolution' that took place in the 20th century is widely recognised by architectural history, comfort devices, which are an integral part of it, are most often neglected or simply ignored. Yet these conservative or regenerative techniques play a truly interdependent role in buildings, from cleverly coloured ducts that contribute to the expression of 'brutalist' interiors, to hot water coils incorporated into the thickness of the floor to reinforce the 'open plan' design, and air heaters and radiators that transform into partitions or disappear into the interstices of the building envelope. Whether concealed, incorporated or exposed, these heating, ventilation and air conditioning networks deserve to be reconsidered as structural elements and not, as is often the case, as mere add-ons or accessories. The pioneering work of figures such as James Marston Fitch and Reyner Banham remains impressively relevant and should be applied to today's architectural projects, whether they focus on energy or not. Whether the approach seeks to exploit the environmental potential of buildings in their context or takes advantage of renewable sources through a range of passive, energy-efficient devices, the experiments conducted in the last century remain highly relevant today. Similarly, new energy-saving paradigms demonstrate the centrality of the notion of material well-being in its new meaning of 'overall comfort'. This will be addressed in relation to the crucial issue of adapting existing buildings to sustainability challenges. By the end of this teaching unit, students should be able to: – identify the importance of physiological comfort issues in the history of architecture;

	- discuss the implications of climate and energy in the genesis of architectural projects; - discuss the history and current status of comfort systems in architectural design, considering conservative (passive systems) and regenerative (active systems) techniques; - evaluate and discuss the material, constructive, formal and spatial consequences of integrating comfort systems into architectural design.
Bibliography	Une bibliographie spécifique, par thème traité, sera distribuée pendant les cours.
Faculty or entity in charge	LOCI

Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Learning outcomes
Master [120] in Architecture (Tournai)	ARCT2M	3		
Master [120] in Architecture (Bruxelles)	ARCB2M	3		