

3.00 credits


22.5 h

Q2



This biannual learning unit is not being organized in 2021-2022 !

Teacher(s)	Altomonte Sergio ;Trachte Sophie ;
Language :	French
Place of the course	Louvain-la-Neuve
Main themes	Part A Background and theories of climate-adapted architecture Sustainable development Part B Advanced heating and cooling systems of buildings Relation between climate-adapted architecture and special building techniques Principles of energetic design in view of the type of building and the type of occupancy, including heat recovery techniques (winter) and natural cooling of buildings (summer) Models of simulation calculations Examples (part A and part B) Research (part A and part B) The course is taught in French
Learning outcomes	At the end of this learning unit, the student is able to : Part A - Architecture and sustainable development - critical analysis of architecture in the sustainable development context, using written texts and examples 1 Part B - Advanced special techniques: energetic design of technical installations in relation to energetic design of buildings
Bibliography	<ul style="list-style-type: none"> • Steele, J. (2005). Architecture écologique : Une histoire critique. Actes Sud • Oliva, J.-P., Courgey, S. (2010), L'isolation thermique écologique : conception, matériaux, mise en 'uvre - Neuf et réhabilitation. Terre Vivante • Contal, M.-H., Revedin, J. (2011), Sustainable Design II : vers une nouvelle éthique pour l'architecture et la ville. Actes Sud • Frey, P. (2010). Learning from Vernacular : pour une nouvelle architecture vernaculaire. Actes Sud • Reiter S. et De Herde A. (2001), L'éclairage naturel des bâtiments. Ministère de la Région Wallonne • Fontoynt M., Perraudeau M., Avouac P. (2011), Construire avec la lumière naturelle. CSTB Editions.
Faculty or entity in charge	LOCI

Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Learning outcomes
Master [120] in Civil Engineering	GCE2M	3		
Master [120] in Architecture and Engineering	ARCH2M	3		