

Due to the COVID-19 crisis, the information below is subject to change, in particular that concerning the teaching mode (presentiel, distance or in a comodal or hybrid format).

3 credits

22.5 h

Q2

**This biannual learning is being organized in 2020-2021**

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
Aims	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 ---- <i>The contribution of this Teaching Unit to the development and command of the skills and learning outcomes of the programme(s) can be accessed at the end of this sheet, in the section entitled "Programmes/courses offering this Teaching Unit".</i>
Bibliography	<ul style="list-style-type: none"> <li>• Steele, J. (2005). Architecture écologique : Une histoire critique. Actes Sud</li> <li>• Oliva, J.-P., Courgey, S. (2010), L'isolation thermique écologique : conception, matériaux, mise en 'uvre - Neuf et réhabilitation. Terre Vivante</li> <li>• Contal, M.-H., Revedin, J. (2011), Sustainable Design II : vers une nouvelle éthique pour l'architecture et la ville. Actes Sud</li> <li>• Frey, P. (2010). Learning from Vernacular : pour une nouvelle architecture vernaculaire. Actes Sud</li> <li>• Reiter S. et De Herde A. (2001), L'éclairage naturel des bâtiments. Ministère de la Région Wallonne</li> <li>• Fontoynont M., Perraudou M., Avouac P. (2011), Construire avec la lumière naturelle. CSTB Editions.</li> </ul>
Faculty or entity in charge	LOCI

<b>Programmes containing this learning unit (UE)</b>				
Program title	Acronym	Credits	Prerequisite	Aims
Master [120] in Architecture and Engineering	<a href="#">ARCH2M</a>	3		
Master [120] in Civil Engineering	<a href="#">GCE2M</a>	3		