

9.00 credits

80.0 h

Q1

Teacher(s)	Altomonte Sergio ;Van Moeseke Geoffrey ;
Language :	French
Place of the course	Louvain-la-Neuve
Learning outcomes	

Bibliography	<p><b>Lectures recommandées</b></p> <p><i>Méthodes de recherche</i></p> <ul style="list-style-type: none"> <li>• Fellows, R. and Liu, A. (2015) <i>Research methods for construction</i>, Fourth ed., John Wiley &amp; Sons, Ltd, The Atrium, Southern Gate, Chichester, West Sussex , United Kingdom.</li> <li>• Naoum, S. G. (2013) <i>Dissertation research &amp; writing for construction students</i>, Third ed., Routledge, New York.</li> <li>• Silverman, D. (2016) <i>Qualitative research</i>, Fourth ed., Sage, Los Angeles.</li> <li>• Yin, R. K. (2018) <i>Case study research and applications: design and methods</i>, Sixth ed., SAGE, Los Angeles.</li> </ul> <p><i>Principes de conception environnementale</i></p> <ul style="list-style-type: none"> <li>• Brown, G.Z., Dekay, M. (2000). <i>Sun, Wind and Light</i>. John Wiley and Sons Ltd: New York.</li> <li>• Kwok, A., Grondzik, W. (2007). <i>The Green Studio Handbook: Environmental Strategies for Schematic Design</i>. 2nd Edition. Elsevier Architectural Press: Oxford.</li> <li>• La Roche, P., (2012), <i>Carbon Neutral Architectural Design</i>. Taylor and Francis: New York.</li> <li>• Meek, C., Van Den Wymelenberg, K.G. (2015). <i>Daylighting and integrated lighting design</i>. Routledge: Oxon.</li> <li>• Pelsmakers, S. (2012). <i>The environmental design pocketbook</i>. RIBA Publishing: London.</li> <li>• Rheinhart, C. (2015) <i>Daylighting Handbook I and II</i>. <a href="http://www.daylightinghandbook.com">http://www.daylightinghandbook.com</a></li> <li>• Szokolay, S. (2007). <i>Introduction to Architectural Science: The Basis of Sustainable Design</i>. Architectural Press: Oxford, 2nd edition.</li> <li>• Tregenza, P., Loe, D. (2014). <i>The Design of Lighting</i>. Routledge: Oxon</li> <li>• Tregenza, P., Wilson, M. (2011). <i>Daylighting. Architecture and Lighting Design</i>. Routledge: Oxon.</li> </ul> <p><i>Simulation des performances du bâtiment</i></p> <ul style="list-style-type: none"> <li>• Anderson, K. (2014). <i>Design energy simulation for architects: guide to 3D graphics</i>. Routledge: New York.</li> <li>• Hensen, J.L.M., Lamberts, R. (Editors) 2019. <i>Building Performance Simulation for Design and Operation</i>. 2n Edition. Routledge: London.</li> <li>• Jankovic, L. (2012). <i>Designing Zero Carbon Buildings Using Dynamic Simulation Modelling</i>. Routledge: Oxon.</li> <li>• Robinson, D. (2011). <i>Computer Modelling for Sustainable Urban Design: Physical Principles, Methods and Applications</i>. Routledge: Oxon.</li> </ul> <p><i>Études de cas</i></p> <ul style="list-style-type: none"> <li>• Baird, J. (2010). <i>Sustainable Buildings in Practice. What the Users Think</i>. Routledge: Oxon.</li> <li>• Edwards, B.W., Naboni, E. (2013). <i>Green Buildings Pay. Design, Productivity and Ecology</i>. Routledge: Oxon.</li> <li>• Feilden Clegg Bradley (2007). <i>The Environmental Handbook</i>. Right Angle: London.</li> <li>• Yudelson, J., Meyer, U. (2013). <i>The World's Greenest Buildings. Promises versus Performance in Sustainable Design</i>. Routledge: Oxon.</li> </ul> <p><i>Autres références</i></p> <ul style="list-style-type: none"> <li>• Altomonte, S., Allen, J., Bluysen, P.M., Brager, G., Heschong, L., Loder, A., Schiavon, S., Veitch, J.A., Wang, L., Wargocki, P. (2020). Ten questions concerning well-being in the built environment. <i>Building and Environment</i>. doi: <a href="https://doi.org/10.1016/j.buildenv.2020.106949">https://doi.org/10.1016/j.buildenv.2020.106949</a></li> <li>• Altomonte, S., Kent, M., Brager, G., Schiavon, S. (2019). Indoor environmental quality and occupant satisfaction in green-certified buildings. <i>Building Research &amp; Information</i>, 47 (3), 255-274.</li> <li>• Altomonte, S., Saadouni, S., Kent, M., Schiavon, S. (2017). Satisfaction with indoor environmental quality in BREEAM and non-BREEAM rated office buildings. <i>Architectural Science Review</i> , 60(4): 343-355.</li> <li>• Altomonte, S., Schiavon, S. (2013). Occupant satisfaction in LEED and non-LEED certified buildings. <i>Building and Environment</i>. 68, 66-76.</li> <li>• Baker, N., Steemers, K. (2002). <i>Daylight Design of Buildings</i>. Earthscan Press.</li> <li>• Cochran, W. G. (1977) <i>Sampling techniques, Wiley series in probability and mathematical statistics</i>, Third ed., Wiley, New York.</li> <li>• Daniels, K. (1998). <i>Low-Tech Light-Tech High-Tech</i>. Birkhauser: Basel.</li> <li>• DePlazes, A. (2005). <i>Constructing Architecture: Materials, Processes, Structures: A Handbook</i>, Birkhäuser: Basel.</li> <li>• Herzog, T., et al. (2008). <i>Façade Construction Manual</i>. Birkhäuser: Basel.</li> <li>• Hindrichs, D.U. (2007). <i>Plusminus 20/40 Latitude: Sustainable Building Design in Tropical and Subtropical Regions</i>. Edition Axel Menges: London.</li> <li>• Kleinbaum, D. G., Kupper, L. L., Nizam, A. and Rosenberg, E. S. (2013) <i>Applied regression analysis and other multivariable methods</i>, Fifth ed., Cengage Learning, Boston, MA.</li> <li>• Kline, P. (1994) <i>An easy guide to factor analysis</i>, Routledge, London ; New York.</li> <li>• Kline, R. B. (2016) <i>Principles and practice of structural equation modeling, Methodology in the social sciences</i>, Fourth ed., The Guilford Press, New York.</li> <li>• MacLean, W., William, P. (2008). <i>Introduction to Architectural Technology</i>, London: Laurence King Publishing.</li> <li>• Mazria, E. (1979). <i>The Passive Solar Energy Book</i>. Rodal Press.</li> <li>• McGregor, A., Roberts, C., Cousins, F. (2013). <i>Two Degrees. The Built Environment and our Changing Climate</i>. Routledge: New York.</li> <li>• Morgan, D. L. (1997) <i>Focus groups as qualitative research / David L. Morgan</i>, Qualitative research methods series, Second ed., Sage Publications, Thousand Oaks, Calif.</li> <li>• Moser, C. A. and Kalton, G. (1979) <i>Survey methods in social investigation</i>, Second ed., Gower, Aldershot, Hants, England; Brookfield, Vt., U.S.A.</li> <li>• Moses, L. E. (1986) <i>Think and explain with statistics</i>, Addison-Wesley Pub. Co., Reading, Mass.</li> <li>• Olgay, V. (1973). <i>Design with Climate</i>. University Press: Princeton.</li> <li>• Ritchie, A., Thomas, R. (Editors) (2009). <i>Sustainable Urban Design. An Environmental Approach</i>. Taylor and Francis: Oxon.</li> <li>• Schiavon, S., Altomonte, S. (2014). Influence of factors unrelated to environmental quality on occupant satisfaction in LEED and non-LEED buildings. <i>Building and Environment</i>. 77, 148-159.</li> <li>• Schittich, C., ed. (2007). <i>In Detail: Building Skins</i>. Birkhäuser: Basel.</li> <li>• Schittich, C., ed. (monthly publication) <i>In Detail: Review of Architecture</i>. Institut für Internationale Architektur-Dokumentation GmbH &amp; Co. KG: Munich.</li> <li>• Stephan, A. &amp; Athanasiadis, A. (2017). Quantifying and mapping embodied environmental requirements of urban</li> </ul>
--------------	---

Faculty or entity in charge	LOCI
-----------------------------	------

<b>Programmes containing this learning unit (UE)</b>				
Program title	Acronym	Credits	Prerequisite	Learning outcomes
Master [120] in Civil Engineering	<a href="#">GCE2M</a>	9		
Master [120] in Architecture and Engineering	<a href="#">ARCH2M</a>	9		