

9.00 credits

80.0 h

Q1

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

Bibliography

**Lectures recommandées**

*Méthodes de recherche*

- Fellows, R. and Liu, A. (2015) *Research methods for construction*, Fourth ed., John Wiley & Sons, Ltd, The Atrium, Southern Gate, Chichester, West Sussex, United Kingdom.
- Naoum, S. G. (2013) *Dissertation research & writing for construction students*, Third ed., Routledge, New York.
- Silverman, D. (2016) *Qualitative research*, Fourth ed., Sage, Los Angeles.
- Yin, R. K. (2018) *Case study research and applications: design and methods*, Sixth ed., SAGE, Los Angeles.

*Principes de conception environnementale*

- Brown, G.Z., Dekay, M. (2000). *Sun, Wind and Light*. John Wiley and Sons Ltd: New York.
- Kwok, A., Grondzik, W. (2007). *The Green Studio Handbook: Environmental Strategies for Schematic Design*. 2nd Edition. Elsevier Architectural Press: Oxford.
- La Roche, P., (2012), *Carbon Neutral Architectural Design*. Taylor and Francis: New York.
- Meek, C., Van Den Wymelenberg, K.G. (2015). *Daylighting and integrated lighting design*. Routledge: Oxon.
- Pelsmakers, S. (2012). *The environmental design pocketbook*. RIBA Publishing: London.
- Rheinart, C. (2015) *Daylighting Handbook I and II*. <http://www.daylightinghandbook.com>
- Szokolay, S. (2007). *Introduction to Architectural Science: The Basis of Sustainable Design*. Architectural Press: Oxford, 2nd edition.
- Tregenza, P., Loe, D. (2014). *The Design of Lighting*. Routledge: Oxon
- Tregenza, P., Wilson, M. (2011). *Daylighting. Architecture and Lighting Design*. Routledge: Oxon.

*Simulation des performances du bâtiment*

- Anderson, K. (2014). *Design energy simulation for architects: guide to 3D graphics*. Routledge: New York.
- Hensen, J.L.M., Lamberts, R. (Editors) 2019. *Building Performance Simulation for Design and Operation*. 2nd Edition. Routledge: London.
- Jankovic, L. (2012). *Designing Zero Carbon Buildings Using Dynamic Simulation Modelling*. Routledge: Oxon.
- Robinson, D. (2011). *Computer Modelling for Sustainable Urban Design: Physical Principles, Methods and Applications*. Routledge: Oxon.


*Études de cas*

- Baird, J. (2010). *Sustainable Buildings in Practice. What the Users Think*. Routledge: Oxon.
- Edwards, B.W., Naboni, E. (2013). *Green Buildings Pay. Design, Productivity and Ecology*. Routledge: Oxon.
- Feilden Clegg Bradley (2007). *The Environmental Handbook*. Right Angle: London.
- Yudelson, J., Meyer, U. (2013). *The World's Greenest Buildings. Promises versus Performance in Sustainable Design*. Routledge: Oxon.

**Autres références**

- 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. *Building and Environment*. doi: <https://doi.org/10.1016/j.buildenv.2020.106949>
- Altomonte, S., Kent, M., Brager, G., Schiavon, S. (2019). Indoor environmental quality and occupant satisfaction in green-certified buildings. *Building Research & Information*, 47 (3), 255-274.
- Altomonte, S., Saadouni, S., Kent, M., Schiavon, S. (2017). Satisfaction with indoor environmental quality in BREEAM and non-BREEAM rated office buildings. *Architectural Science Review*, 60(4): 343-355.
- Altomonte, S., Schiavon, S. (2013). Occupant satisfaction in LEED and non-LEED certified buildings. *Building and Environment*. 68, 66-76.
- Baker, N., Steemers, K. (2002). *Daylight Design of Buildings*. Earthscan Press.
- Cochran, W. G. (1977) *Sampling techniques, Wiley series in probability and mathematical statistics*, Third ed., Wiley, New York.
- Daniels, K. (1998). *Low-Tech Light-Tech High-Tech*. Birkhauser: Basel.
- DePlazes, A. (2005). *Constructing Architecture: Materials, Processes, Structures: A Handbook*, Birkhäuser: Basel.
- Herzog, T., et al. (2008). *Façade Construction Manual*. Birkhäuser: Basel.
- Hindrichs, D.U. (2007). *Plusminus 20/40 Latitude: Sustainable Building Design in Tropical and Subtropical Regions*. Edition Axel Menges: London.
- Kleinbaum, D. G., Kupper, L. L., Nizam, A. and Rosenberg, E. S. (2013) *Applied regression analysis and other multivariable methods*, Fifth ed., Cengage Learning, Boston, MA.
- Kline, P. (1994) *An easy guide to factor analysis*, Routledge, London ; New York.
- Kline, R. B. (2016) *Principles and practice of structural equation modeling, Methodology in the social sciences*, Fourth ed., The Guilford Press, New York.
- MacLean, W., William, P. (2008), *Introduction to Architectural Technology*, London: Laurence King Publishing.
- Mazria, E. (1979). *The Passive Solar Energy Book*. Rodal Press.
- McGregor, A., Roberts, C., Cousins, F. (2013). *Two Degrees. The Built Environment and our Changing Climate*. Routledge: New York.
- Morgan, D. L. (1997) *Focus groups as qualitative research / David L. Morgan, Qualitative research methods series*, Second ed., Sage Publications, Thousand Oaks, Calif.
- Moser, C. A. and Kalton, G. (1979) *Survey methods in social investigation*, Second ed., Gower, Aldershot, Hants, England; Brookfield, Vt., U.S.A.
- Moses, L. E. (1986) *Think and explain with statistics*, Addison-Wesley Pub. Co., Reading, Mass.
- Olgay, V. (1973). *Design with Climate*. University Press: Princeton.
- Ritchie, A., Thomas, R. (Editors) (2009). *Sustainable Urban Design. An Environmental Approach*. Taylor and Francis: Oxon.
- Schiavon, S., Altomonte, S. (2014). Influence of factors unrelated to environmental quality on occupant satisfaction in LEED and non-LEED buildings. *Building and Environment*. 77, 148-159.
- Schittich, C., ed. (2007). *In Detail: Building Skins*. Birkhäuser: Basel.
- Schittich, C., ed. (2007). *Monthly publications Detail Review of Architecture*. Institut für Internationale Architektur-Dokumentation GmbH & Co. KG: Munich.
- Stephan, A. & Athanassiadis, A. (2017). Quantifying and mapping embodied environmental requirements of urban

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	GCE2M	9		
Master [120] in Architecture and Engineering	ARCH2M	9		