



3.00 crédits	30.0 h	Q2
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Enseignants	Stephan André ;
Langue d'enseignement	Français
Lieu du cours	Louvain-la-Neuve
Acquis d'apprentissage	
Bibliographie	<p><b>Parametric Design in Rhino and Grasshopper:</b></p> <ul style="list-style-type: none"> <li>• Tedeschi, A. (2014). <i>AAD, Algorithms-aided design: parametric strategies using Grasshopper</i>. Le Penseur.</li> <li>• Di Marco, G. (2018). <i>Simplified Complexity: Method for Advanced NURBS Modeling with Rhinoceros®</i>. Le Penseur.</li> </ul> <p><b>Environmental Parametric Design:</b></p> <ul style="list-style-type: none"> <li>• Hollberg, A., &amp; Ruth, J. (2016). LCA in architectural design—a parametric approach. <i>The International Journal of Life Cycle Assessment</i>, 21(7), 943-960. doi:10.1007/s11367-016-1065-1</li> <li>• Stephan, A., Jensen, C. A., &amp; Crawford, R. H. (2017). Improving the Life Cycle Energy Performance of Apartment Units through Façade Design. <i>Procedia Engineering</i>, 196, 1003-1010. doi: <a href="https://doi.org/10.1016/j.proeng.2017.08.042">https://doi.org/10.1016/j.proeng.2017.08.042</a></li> <li>• Stephan, A., &amp; Crawford, R. H. (2016). The relationship between house size and life cycle energy demand: Implications for energy efficiency regulations for buildings. <i>Energy</i>, 116, Part 1, 1158-1171. doi: <a href="http://dx.doi.org/10.1016/j.energy.2016.10.038">http://dx.doi.org/10.1016/j.energy.2016.10.038</a></li> </ul> <p><b>Relevant websites:</b></p> <ul style="list-style-type: none"> <li>• <a href="https://parametric-architecture.com/">https://parametric-architecture.com/</a></li> <li>• <a href="https://parametrichouse.com/">https://parametrichouse.com/</a></li> <li>• <a href="https://grasshopperdocs.com/">https://grasshopperdocs.com/</a></li> <li>• <a href="https://www.ladybug.tools/">https://www.ladybug.tools/</a></li> </ul> <p><b>Academic conferences on parametric design:</b></p> <ul style="list-style-type: none"> <li>• <a href="http://ecaade.org/">http://ecaade.org/</a></li> <li>• <a href="https://www.caadria.org/">https://www.caadria.org/</a></li> </ul>
Faculté ou entité en charge:	LOCI

<b>Programmes / formations proposant cette unité d'enseignement (UE)</b>				
Intitulé du programme	Sigle	Crédits	Prérequis	Acquis d'apprentissage
Master [120] en architecture/ TRN	ARCT2M	3		
Master [120] : ingénieur civil architecte	ARCH2M	3		
Master [120] en architecture/ BXL	ARCB2M	3		