

3.0 credits	20.0 h + 15.0 h	1q
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Teacher(s) :	Faux Pascaline ;
Language :	Français
Place of the course	Tournai
Inline resources:	<p>Publications « architecture et climat », université catholique de Louvain [> www.uclouvain.be/architecture-climat.html]</p> <p>Energie+ Efficacité énergétique des bâtiments tertiaires [> www.energieplus-lesite.be]</p> <p>EPFL, coursera, Energétique du bâtiment [> http://moodle.epfl.ch/course/view.php?id=721]</p> <p>Portail de l'énergie en Wallonie [> http://energie.wallonie.be]</p>
Prerequisites :	<i>The prerequisite(s) for this Teaching Unit (Unité d'enseignement – UE) for the programmes/courses that offer this Teaching Unit are specified at the end of this sheet.</i>
Aims :	<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>
Evaluation methods :	Written exam: theory and exercises
Teaching methods :	Theory: lessons in auditorium Exercices: two students groups works
Content :	<p>Theory</p> <p>--</p> <p>Energy (work and heat) - Power</p> <p>--</p> <p>Heat propagation modes</p> <p>--</p> <p>Comfort and architecture: thermal comfort and comfort based on air quality</p> <p>--</p> <p>House energy appraisal: transmission losses and ventilation losses. Nominal power for heating. Thermal bridges</p> <p>--</p> <p>Hygrothermal - risks of internal condensation</p> <p>Exercices</p> <p>--</p> <p>Exercices with heat/work/power notions</p> <p>--</p> <p>Study case: analysis of a unifamilial house</p> <p>--</p> <p>Thermal transmission coefficients</p> <p>--</p> <p>Global level of insulation (k)</p> <p>--</p> <p>Ventilation : sizing principles</p> <p>--</p> <p>Risk analysis of internal condensation (Glaser method)</p>
Bibliography :	Lessons supports: copy of PowerPoint presentations
Faculty or entity in charge:	LOCI

Programmes / formations proposant cette unité d'enseignement (UE)				
Intitulé du programme	Sigle	Credits	Prerequis	Acquis d'apprentissage
Bachelor in Architecture (Tournai)	ARCT1BA	3	LTARC1143 and LTARC1144	