UCLouvain

larcx2002

2025

Heritage Identification and Building Archaeology

6.00 credits	60.0 h	Q1

This biannual learning is being organized in 2025-2026

Teacher(s)	Bolle Caroline ;Vandenbroucke David ;
Language :	French
Place of the course	Autre site
Main themes	The teaching of the 'Architecture and Heritage' orientation aims to confront students with the interaction between the physical and cultural conditions of the architectural project in a pre-existing building. Opportunities for linking this field of study to university research focus particularly on a transdisciplinary vision of the knowledge and understanding of the physical state of a building, as well as on the methodology of intervention and the integration of the project into this pre-existing structure.
Learning outcomes	**At the end of this learning unit, the student is able to :** **Specific Learning Outcomes** By the end of this course, students will be able to: · Develop a methodology for analyzing an existing building, incorporating preliminary studies and relevant surveys, · Conduct surveys of an existing building, applying principles of building archaeology, · Interpret and critically assess the results of preliminary studies and surveys, · Apply knowledge of heritage identification to establish a relative chronology of the building under study, · Create summary documents that highlight the potential uncovered by the surveys and provide recommendations for the conservation and enhancement of the building. **General Learning Outcomes** In line with the program's learning outcomes (LOs), this course contributes to the development and acquisition of the following LOs: · LO1.1 Prioritize the parameters and issues of a given situation. · LO2.1 Inventively master and apply the conventions of representation in two and three dimensions. · LO2.4 Inventively illustrate construction logics. · LO3.2 Understand and apply the construction and technical processes related to architecture. · LO4.1 Understand and mobilise the concepts and methods of scientific disciplines. · LO4.4 Understand and assess the environmental, social, and economic consequences of architectural choices. · LO5.4 Advocate for and act in favor of exemplary architecture in light of Sustainable Development requirements. · LO6.1 Acquire and rigorously apply disciplinary, interdisciplinary, or transdisciplinary methods of scientific research. · LO6.2 Formulate a research question and define a research subject in and on architecture. · LO6.3 Present the results of research within and about architecture while adhering to the conventions of scientific communication.
Evaluation methods	The assessment consists of a written assignment, to be completed in pairs or groups of three, to be submitted on MOODLE at the beginning of the examination period and presented orally, as a team, before a jury composed of the course coordinators and, where appropriate, invited experts whose professional activity is related to the subject of study. As a general rule, the same grade is awarded to all members of the group, unless the coordinators observe an imbalance in contributions (e.g., repeated absences, insufficient participation in group work). In such cases, the coordinators reserve the right to assign an individual grade to the student concerned. This assignment constitutes 100% of the final grade and is evaluated collectively. The same assessment procedure applies during the resit session. Should generative artificial intelligence (AI) tools be employed, their use must be responsible and fully aligned with the principles of academic and scientific integrity. Accordingly, any use of generative AI inconsistent with the permitted practices outlined in the course description shall be deemed an irregularity under Article 107 of the RGEE (i.e., work not personally produced by the student within the context of an assessment).

Teaching methods	Theoretical lectures and presentations by guest speakers. Visits (including site visits) to emblematic heritage buildings, to a quarry, and to the *Pôle de la Pierre* in Soignies, with practical exercises in stone cutting and restoration, under the guidance of specialists, craftsmen, and heritage managers. Field exercises in surveying, archaeological analysis of built structures, and identification of pathologies.
Content	**Theoretical courses, site visits, and practical exercises structured around the following themes:** **1. Identification of Heritage** The course introduces students to the recognition of characteristic architectural elements, whether complete or fragmentary, to describe them using appropriate terminology shared by other stakeholders in the restoration project, to understand their traditional manufacturing techniques, to mentally and graphically reconstruct missing parts where necessary, and to situate them within their historical context. **2. Manual and Digital Surveying Techniques** **3. Preliminary Studies and Building Archaeology** The course will address the objectives, methods, and purposes of preliminary analyses through the presentation of case studies and practical exercises. **4. Pathologies / Diagnosis** The principal pathologies affecting historic buildings will be presented. Observations and analysis must enable the identification of causes. These causes must be assessed in terms of intensity and chronology of occurrence, which allows for an evaluation of the risk of degradation at the time of observation and in the near future. Proposed interventions—whether protection, eradication, restoration, or improvement—will then be considered to ensure the proper conservation and long-term preservation of the monument. **5. Production of a Preliminary Study** The application of the concepts taught will take place through an immersive exercise in the Saint-Brice district of Tournai. A list of houses illustrating the evolution of civil architecture will be provided to the students. They may either choose to study the façade(s) of one of these houses or develop a research question applicable to several houses (for example, the study of the evolution of windows, specific construction techniques, the evolution of the use of certain materials and their impact on design, etc.), or study the evolution of street layouts and their treatment (in connection with the research project on paving stones initiated by the City of Tournai). Each group will begin with a photographic survey of the structure(s) under study, produce sketches, complete and verify the provided surveys, identify architectural elements, describe them with the appropriate terminology, reconstruct fragmentary elements, and detail the materials, their characteristics, their condition, and their pathologies. Each group will produce a synthesis document of the research carried out. In the case of the specific analysis of a façade, each group will provide the relative chronology as well as 2D or 3D reconstructions of significant phases. A diagnosis regarding the identified pathologies will be established, highlighting the potential revealed by the study and proposing recommendations for the conservation and enhancement of the property, addressed to the client (*Maître de l'Ouvrage*) or a potential project designer. The groups will be invited to share the results of their research with one another in order to enrich collective reflection, refine methodologies, and deepen knowledge.
Inline resources	The materials for the theoretical courses will be made available on MOODLE progressively as the lectures are delivered. The same will apply to documentary resources related to the study topics.
Bibliography	BOLLE C., COURA G. & LEOTARD J.-M. (dir), *L'archéologie des bâtiments en question. Un outil pour les connaître, les conserver et les restaurer* . Actes du colloque international Liège les 9 et 10 novembre 2010, Etudes et Documents, Archéologie 35, Ministère de la Région Wallonne, Namur, 2014. HOFFSUMMER P., *Les charpentes de toitures en Wallonie* , Etudes et Documents, Monuments et Sites 1, Ministère de la Région Wallonne, Namur, 1999. HOFFSUMMER P. (dir), *Les charpentes du XIe au XIXe siècle, Typologie et évolution en France du Nord et en Belgique,* Cahiers du Patrimoine, MONUM, Editions du Patrimoine, Paris, 2002. PEROUSE DE MONTCLOS J.-M., *Principes d'analyse scientifique, Vocabulaire de l'Architecture, méthode et vocabulaire* , MONUM, Editions du Patrimoine, Paris, 2011.
Faculty or entity in charge	LOCI

Programmes containing this learning unit (UE)

Program title	Acronym	Credits	Prerequisite	Learning outcomes
Master [120] in Architecture (Tournai)	ARCT2M	6		
Master [120] in Architecture (Bruxelles)	ARCB2M	6		