**UCLouvain**

**licar2312**

*2024*

# Territorial and environmental engineering

| 4.00 credits | 45.0 h | Q1 |
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| Teacher(s) | Gallez Olivier ;Savary Céline ; |
| Language : | French |
| Place of the course | Louvain-la-Neuve |
| Learning outcomes | |
| Evaluation methods | Continuous evaluation of projects and presentations carried out during the year:<br><br>• "Bridges" project: 1/3<br>• "Urban hydraulics, floods and inundations" (two projects/homeworks): 1/3<br><br>Written exam on the part related to urban hydraulics, floods and inundations: 1/3 |
| Teaching methods | Lectures, supervised exercises, homeworks and projects leading to oral presentations. |
| Content | **Part "floods and inundations"**<br>This part of the course discusses the use of water and its place in the territory, considering the SDGs, in particular Goal 6 "Clean water and sanitation", Goal 11 "Cities and communities "and Goal 13 "Measures to combat climate change". The following technical knowledge, necessary to carry out actions in these areas, is covered:<br><br>• Calculation of a water distribution network, using software used in practice<br>• Introduction to hydrology, evaluation and mapping of precipitation data<br>• Design of urban drainage systems (application of the rational method)<br>• Floods and inundations : origins, aggravating factors, protective measures |
| Other infos | The use of generative Artificial Intelligence (AI) tools is tolerated as long as they are used responsibly and in accordance with academic and scientific integrity practices. In particular, the student is required to systematically indicate all parties having used AI, e.g. in a footnote specifying whether AI was used to search for information, to draft the text or to correct it. Furthermore, sources of information must be systematically cited while respecting bibliographic referencing standards. The student also remains responsible for the content of his or her production, regardless of the sources used. |
| Faculty or entity in charge | LOCI |

## Programmes containing this learning unit (UE)

| Program title | Acronym | Credits | Prerequisite | Learning outcomes |
|---|---|---|---|---|
| Master [120] in Architecture and Engineering | ARCH2M | 4 | | 🔍 |