

In view of the health context linked to the spread of the coronavirus, the methods of organisation and evaluation of the learning units could be adapted in different situations; these possible new methods have been - or will be - communicated by the teachers to the students.

2 credits

0 h + 20.0 h

Q1

Teacher(s)	Biolders Charles ;Javaux Mathieu ;Vanclooster Marnik (coordinator) ;
Language :	French
Place of the course	Louvain-la-Neuve
Main themes	<p>Project</p> <p>The integrated project on soil and water resources aims combining different knowledges, skills and competences acquired in previous courses of the program, for i) analyzing and understanding a real-case soil and/or water management problem; ii) identifying and documenting possible technical solutions of the management problem, taking into account the administrative and legal boundary conditions; iii) selecting and designing the most promising solutions; iv) estimating the costs of the proposed solution. The soil and/or water problem that is submitted to students complies with the complexity of a real case operational engineering study, but also with the time that can be allocated by the students to the project. The proposed solution is delivered in a written report and an oral presentation targeting a non-specialized public.</p> <p>Excursions</p> <p>Professional visits of soil and water engineering works in Belgium and possibly abroad.</p>
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	<p>Due to the COVID-19 crisis, the information in this section is particularly likely to change.</p> <p>Project:</p> <p>Multi-criteria evaluation of project report (quality of the technical solutions, quality of the report, ...) and the oral presentation and defense of the project (quality of the presentation and quality of the answers to the questions posed by the jury).</p> <p>Excursions:</p> <p>Report of trips and / or field trip.</p>
Teaching methods	<p>Due to the COVID-19 crisis, the information in this section is particularly likely to change.</p> <p>Project:</p> <p>During the first week of the semester, the course structure is introduced, student groups are formed, the specific problems of the project is introduced , the expected results are explained, and the various actors and stakeholders are introduced. Following a site visit and / or meetings with key stakeholders, students themselves define detailed project activities to be undertaken, as well as an execution plan. From the third week onwards, students implement the project execution plan. Regular meetings (weekly) with supervisors and tutors allows monitoring the project progress. In week 14 of Q1 students submit their report. The project is presented and defended orally during the examination session.</p> <p>Excursion or study tour :</p> <p>Tours in Belgium (5 days) and possibly abroad (one week) to discover the many aspects of soil and water resources engineering and management.</p>
Content	<p>Project</p> <p>A practical soil and/or water management case study (flooding problem, mudflow problem, soil erosion problem, etc...) is submitted to the students. The students are forming a project team (a group of 3-5 students) to propose an engineered solution for the problem. The project involves individual work, team work, and regular meetings with tutors and, in some cases, other professionals of the sector. The project report is due the last week of the semester. The project results are defended orally during the examination session.</p> <p>Excursion</p> <p>Visits to various sites in Belgium and possibly abroad</p>
Inline resources	Moodle

Bibliography	<ul style="list-style-type: none">• Un vademecum du cours, décrivant le détail du programme, est disponible sur Moodle.• Pour le projet, un serveur de partage des données est accessible sur Moodle.
Other infos	This course can be given in English.
Faculty or entity in charge	AGRO

Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Aims
Master [120] in Agricultural Bioengineering	BIRA2M	2		