

5.0 credits	30.0 h + 22.5 h	1q
-------------	-----------------	----

Teacher(s) :	Cogels Olivier ; Vanclooster Marnik (coordinator) ;
Language :	Français
Place of the course	Louvain-la-Neuve
Main themes :	<ul style="list-style-type: none"> - Concepts and issues of integrated water management at the scale of a management unit (a dam, an irrigation perimeter, a catchment) ; - Conceptual modelling of large scale hydro-systems (catchments, dams, perimeters, groundwater bodies) ; - Initiation to stochastic modelling of hydro-systems ; - Multi-criteria analysis applied to water resources management
Aims :	<p>The principle objective of this course is to understand and to unravel issues related to integrated water management in the 21st century. The course adopts a multi-disciplinary and multi-objective approach and situates at the interface of technical hydrological analysis (e.g. optimisation), information technology (e.g. geographical information systems) and water management policy (e.g. implementation of sustainable development policy). At the end of the course, the student must be able :</p> <ul style="list-style-type: none"> - to understand the concept of integrated water management ; - to model the hydro-system, considering the random properties of the hydro-system ; - to evaluate the performance of a hydro-system with criteria formulated by different actors ; - to develop a methodology for solving complex hydrological problems in view of formulating water management measures which respect different objectives. <p><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></p>
Other infos :	Precursory Courses General hydrology
Cycle and year of study :	> Master [120] in Agricultural Bioengineering > Master [120] in Environmental Bioengineering > Advanced Master in Water Resources
Faculty or entity in charge:	AGRO