

10.0 credits	60.0 h	1q
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Teacher(s) :	Van Vyve Mathieu ; Chevalier Philippe ;
Language :	Anglais
Place of the course	Louvain-la-Neuve
Inline resources:	http://icampus.uclouvain.be/claroline/course/index.php?cid=LLSMF2019
Prerequisites :	-- linear programming -- operations research -- mathematical modeling
Main themes :	The scope is the realization of a project, devoted to the development of a prototype decision support system, based on a quantitative modelling approach applied on a real case study. The volume of the activity (10 credits) allows the students to treat several managerial dimensions of the business case studied.
Aims :	Having regard to the LO of the programme, this activity contributes to the development and acquisition of the following LO : -- 3. A scientific and systematic approach -- 3.1. Conduct a clear, structured, analytical reasoning -- 3.2. Collect, select and analyze relevant information -- 3.3. Consider problems using a systemic and holistic approach -- 3.4. Perceptively synthesize demonstrating a certain conceptual distance -- 3.5. Produce, through analysis and diagnosis, implementable solutions -- 4. Innovation and entrepreneurship -- 4.1. Identify new opportunities, propose creative and useful ideas -- 4.2. Initiate, develop and implement ideas around a new product, service, process -- 4.3. collaborate and actively drive forward collective actions for change -- 6. Teamwork and leadership -- 6.1. Work in a team -- 6.2. Exercise enlightened leadership skills -- 7. Project management -- 7.1. Analyse a project within its environment and define the expected outcomes -- 7.2. Organize, manage and control the process -- 7.3. Make decisions and take responsibility for them in an uncertain world The objective is also to integrate some knowledge acquired in the bachelor program (disciplinary courses), the master program in management (functional courses in management) and the project management course through a project based learning approach. At the end of the class, the student will be able to : -- -- model a management problem using quantitative tools -- -- identify adequate operations research tools (models and methods) to be used in order to obtain an adequate solution (trade-off between solution time and solution quality)

	<p>-- implement the solution approach identified, and to validate the approach and results obtained. <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>
Evaluation methods :	<p>-- project reports -- group presentation -- individual exam</p>
Teaching methods :	<p>In-class activities -- Lectures -- Interactive seminar -- Problem based learning -- Project based learning At home activities -- Readings to prepare the lecture -- Paper work -- Students presentation</p>
Content :	<p>-- Several introductory lectures (beginning of the semester) : -- project scope and definition, -- study of related operations research models and methods, -- project group organization: tasks, objectives, due-dates -- Project realization -- Project reporting and final group presentations</p>
Bibliography :	<p>Notes distributed at the beginning of the term</p>
Faculty or entity in charge:	<p>CLSM</p>

Programmes / formations proposant cette unité d'enseignement (UE)				
Intitulé du programme	Sigle	Credits	Prerequis	Acquis d'apprentissage
Master [120] in Business Engineering	INGE2M	10	-	