UCLouvain

lbire2205a

2023

Decision tools and project management - Decision tools

3.00 credits	22.5 h + 7.5 h	Q1

Teacher(s)	Amory Raphaël ;Gaspart Frédéric ;
Language :	English > French-friendly
Place of the course	Louvain-la-Neuve
Prerequisites	Knowledge and know-how in basic courses of the bio-enginering programme.
Learning outcomes	
Evaluation methods	The evaluation is based on a written exam (by e-mail) with exercises for Part 1 and a take-home exam for Part 2.
Content	Part 1 (in English) The course outlines, explains and compares various methods and decision making tools available in natural and social sciences. It distinguishes and shows the complementarities of statistics and economic analysis. Multi-criteria decisions and decisions under uncertainty in situations with several interacting decision-makers are illustrated with examples taken in fields relevant for the students. Part 2 (in French) Stemming from the professional activity of the bio-engineer, the cours outline the project-based approach in a context of rural development or environmental management by public or private actors. The project-based approach is defined in contrast with other modes of intervention and outlined through the project life-cycle (identification, design, feasibility, programming, funding, implementation, follow-up, assessment). The incentives of various actors (fund raisers, field workers, target groups, etc.) and institutional partnerships are analysed. Lectures emphasize the criteria and the methods for an impact assessment, and the practical implementation thereof. Critical analyses are performed by the students on case studies in the realms of rural development and the environment, so that they develop a professional attitude towards these problems. Finally, drawing from practical examples, lectures describe the methods for the identification, the design and the study of feasibility at the technical, environmental, organisational, social, financial and economic levels. Some legal and normative aspects are discussed. Methods and tools are presented on the basis of the following schedule : - basic definitions and concepts : project, program, project management, project life-cycle, strategies, stakeholders, resources, etc. - Strategic planning and programming - Identification of projects, the idea of a project, the problem tree, the target tree - Planning : strategies, indices, WBS organigram, GANTT diagram, risk analysis, budget, quality planning, organisational and managerial aspects, monitoring - Implementation : launch, actor roles, organisational modes, risk/conflict/change management, communication - follow-up, monitoring, reporting - Ex-post assessment
Inline resources	Moodle
Faculty or entity in charge	AGRO

Programmes containing this learning unit (UE)

Program title	Acronym	Credits	Prerequisite	Learning outcomes
Master [120] in Forests and Natural Areas Engineering	BIRF2M	3		
Master [120] in Environmental Bioengineering	BIRE2M	3		
Master [120] in Agriculture and Bio-industries	SAIV2M	3		
Master [120] in Agricultural Bioengineering	BIRA2M	3		
Master [120] en urbanisme et développement territorial	URBA2M	3		