

10.00 credits

75.0 h + 15.0 h

Q2

Teacher(s)	Creemers Stefan ;Tancrez Jean-Sébastien ;
Language :	French
Place of the course	Mons
Prerequisites	Introductory course in optimization or operations research.
Main themes	Nowadays, projects are ubiquitous in the professional life as well as in the private life. In an increasingly complex and competitive economic environment, a structured and coordinated project management is crucial to carry out projects that are more and more strategic, multidisciplinary, specific, challenging and constrained by time and budget. In this class, we combine classroom lectures to introduce the methodologies and theories to efficiently conduct projects and a group project to apply these project management skills on a project with a clear quantitative flavor, aiming to solve a realistic practical problem. The course includes two parts that are interrelated. The first part introduces the main concepts, practices and techniques in project management. The second part proposes to analyze a quantitative problem and to develop a practical solution for this problem, putting the project management skills into practice. The project management part presents and discusses subjects like: the context and the organization around projects, their definition, their evaluation, their planning and resource scheduling, and the control of their advancement and of their risks. In the second part, during the quantitative project, the problem is inspired by a realistic and complex case, potentially coming from a company, and requiring the application of quantitative methods. These problems aim for example to improve the planning of a production unit, the transport organization, the scheduling of tasks, the layout of a storage area, the routing of vehicles, etc.
Learning outcomes	At the end of this learning unit, the student is able to : At the end of this course, students should be able to: 1. Analyze a realistic problem, using a structured methodology. - Apply the appropriate techniques to propose a useful solution. - Manage a project within a team in a coordinated way. - Recognize the context of a project and define its objectives. - Prepare a planning for a project and schedule the resources. - Control, adapt and manage the risks in a project.
Bibliography	E. W. Larson et G. F. Gray, adaptation française par C.-A. Guillotte et J. Charbonneau, Management de projet, 2ème édition, Dunod, Paris, 2014.
Faculty or entity in charge	CLSM

Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Learning outcomes
Master [120] : Business Engineering	INGM2M	10		