

FMS8AB INDUSTRIAL MANAGEMENT PERFORMANCE MONITORING

FMS8AB	ECTS Credits : 3	Semester : S8
Industrial management and performance monitoring		
Duration : 35 hours		
Person(s) in charge :		
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Keywords : Strategy, performance, industrial testimony, economic calculations, investment choices		
Prerequisites: The second part of this course requires general mathematical knowledge, usually acquired previously during the engineering course		
Objective: Bring fundamental notions in the domains of the management and the financial calculation		
Program and contents :		
<ul style="list-style-type: none">Educational objectives : <p>This course consists of 2 different parts (of respectively 15 hours and 20 hours):</p> <ol style="list-style-type: none">Awareness to the politics of company and to the link strategy/management/performance <p>In what choices of strategy and management can impact on the performance of a company ? Followed by industrial testimonies (intended to report criteria and ways of evaluation of the performance within various companies, modes of management associated to reach the aimed performance).</p> <ol style="list-style-type: none">A teaching centred on the economic calculation <p>The implementation and success of any project is highly dependent on a good knowledge of its economical aspects. This course's goal is to give the engineer-students the keys necessary to a good understanding of the fundamental elements of economic and financial calculus.</p> <ul style="list-style-type: none">Contents - Program <p>This course is divided into two distinct parts (respectively 15 and 20 hours each) :</p> <ol style="list-style-type: none">To raise awareness over a company's strategy and over the bond between strategy/management performance (in what ways aspects of strategy and management can impact a firm's performance ?) Followed by industrial case-studies (aimed at assessing the criteria and means by which performance is measured in different companies and the associated management models used to reach the target productivity)Sessions focused on economic calculation The performance of any company goes through an adapted investment policy. This part of the course that will largely rely on the use of a spreadsheet, will bring the mathematical basics on which economical choices on the question of investment are base.<ul style="list-style-type: none">Introduction to corporate finance : worth of money over time and discounting cash-flowArbitration and financial assets assessmentBinomial tree-based models and outcome evaluationChoice of investmentsEconomic comparison of rival projects : economical optimisationExpected yield-risk relationPlace of financial mathematics as a help to decision taking and risk management <ul style="list-style-type: none">Evaluation <p>Evaluation will be an average of the participation in class, of an oral presentation group-work (management) and of the final examination in economic calculation.</p>		
Abilities :		
Levels	Description and operational verbs	
Know	Notions of strategic analysis and management of organizations, the theories of choice of investment	
Understand	The difficulty of interpretation of the analyzed performance, considering the multiplicity of the parameters having an impact	
Apply	Methodologies	
Analyse	The links between certain decisions of management (of managerial type or investment) and their effects on the performance.	
Summarise		
Assess		

Evaluation :				
<input checked="" type="checkbox"/> Written test	<input checked="" type="checkbox"/> Continuous Control	<input checked="" type="checkbox"/> Oral presentation	<input type="checkbox"/> Project	<input type="checkbox"/> Written report