QANT2100 Elements of operational research

[45h+15h exercises] 6 credits

Teacher(s): Michel Herman
Language: French
Level: Second cycle

Aims

At the end of the class, the student should be able to identify the decision making techniques that could be used in a given environment, to develop a model for the problem, to solve it with the right softwares and to make the postoptimal analysis of the results.

Main themes

Basic education to the formulation and the use of mathematical models in a managerial environment, this course covers a set of models of different types (deterministic, random) that can be solved with different techniques and applicable in various areas.

Content and teaching methods

Content
- Mathematical modelling
- Linear programs and extensions
- Integer linear programs
- Queuing theory
- Network models
- Simulation
- Multicriterion Decision Making

Methods
The course is organised around simplified real models

Other information (prerequisite, evaluation (assessment methods), course materials recommended readings, ...)

Prerequisite : nihil.
Evaluation : Written test
Support : Applied Management Science - A computer Approach for Decision Making
Lawrence and Pasternack
Références : Wiley and Sons ISBN 0-471-13776-6
Pedagogic team: Michel HERMAN

Programmes in which this activity is taught

LINF2	Licence en informatique

Other credits in programs

ECAP21	Première licence en sciences de gestion	(5.5 credits)	Mandatory
LINF21	Première licence en informatique	(6 credits)	
LINF21/GN	Première licence en informatique (informatique générale)	(6 credits)	Mandatory
LINF21/GS	Première licence en informatique (informatique de gestion)	(6 credits)	Mandatory