1q

## Université catholique de Louvain

## Outils quantitatifs d'aide à la décision

5.0 credits

**MQANT2219** 

2014-2015

30.0 h + 0.0 h

).0 h

Teacher(s) :	Catanzaro Daniele ;
Language :	Français
Place of the course	Mons
Prerequisites :	Basics in probability, statistics, and mathematics
Main themes :	Decisions in an organization are taken on data that are getting more and more abundant and whose formats are increasingly varied ; these decisions are therefore becoming more and more complex. Various tools and methods can facilitate and improve the decision making process, under risky conditions or not, especially in helping managers to make the right choices and to propose the most appropriate actions to support their business. Among the covered topics are decision trees, simulation techniques, stochastic modeling, heuristics, and various multivariate statistical analysis methods such as principal component analysis or discriminant analysis.
Aims :	At the end of this course, the student is able to :     * Identify and characterize an existing problem requiring the processing of data ;     * Define the needs in terms of data and determine the nost suitable tools and methods to apply ;     * Implement the appropriate methods and use the appropriate tools on real decision problems ;     * Propose an appropriate way to communicate the results, in order to answer at best to an identified problem. 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".
Cycle and year of study :	Master [120] in Business engineering Master [120] in Business Engineering
Faculty or entity in charge:	BLSM