

PROD2950 Operations management and quantitative modelling

[45h] 5 credits

**Teacher(s):** Guy Keymolen

Language: French
Level: Second cycle

#### Aims

At the end of the class, students should be able

o to specify the reference framework and the elements playing a part in the decision making process in the field of operations and production management;

o to analyze these elements, in particular using mathematical models and techniques (without neglecting human factors), in order to help in the decision-making process.

#### Main themes

This course is both a basic course in operations management and in management science. Its scope consists of studying how operations management problems could be solved using mathematical models and techniques provided by operations research.

## Content and teaching methods

### Content

The course starts with an introduction to the basics of operations management and production of goods and services. Next, two topics are studied: the design of a production system and the mid to short-term planning of operations. The quantitative tools are introduced progressively with their relevance.

Methods

Lecture and exercises (cases and problems).

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

Prerequisite: basic course in mathematics, statistics and probabilities

Evaluation: open book written exam (problem solving)

Support: HEIZER J. and RENDER B., Operations Management, Pearson Education (2004)

References: see support

Pedagogic team: assistants of the POMS unit

## Programmes in which this activity is taught

**GEST2M1** Master en sciences de gestion

MULT2MS Master en communication multilingue, à finalité spécialisée en

langues des affaires

## Other credits in programs

MULT21MS Première année de master en communication multilingue, à (5 credits)

finalité spécialisée en langues des affaires

MULT22MS Deuxième année de master en communication multilingue, à (5 credits)

finalité spécialisée en langues des affaires

MULT2MS Master en communication multilingue, à finalité spécialisée en (5 credits)

langues des affaires