

Decision Making for Business (F000836)

Course size (nominal values; actual values may depend on programme)

Credits 6.0 Study time 180 h Contact hrs 45.0 h

Course offerings and teaching methods in academic year 2018-2019

A (semester 1)	English	seminar: coached exercises	16.25 h
		microteaching	3.75 h
		lecture	15.0 h
		project	15.0 h

Lecturers in academic year 2018-2019

Vanhoucke, Mario EB24 lecturer-in-charge

Offered in the following programmes in 2018-2019

	crdts	offering
Master of Science in Business Engineering (main subject Data Analytics)	6	A
Master of Science in Business Engineering (main subject Finance)	6	A
Master of Science in Business Engineering (main subject Operations Management)	6	A
Master of Science in Economics	6	A
Exchange programme in Economics and Business Administration	6	A

Teaching languages

English

Keywords

Operations Research, Management Science

Position of the course

The course is a more advanced course of operationeel onderzoek (3e jaar bachelor) and aims at gaining insight in the applications of the different methods and techniques of Operations Research in practice. Real-life cases will be discussed during the course, and the solution approaches will be highlighted. With the use of optimization software, the problems will be solved and the solution will be analyzed in a critical way. Although the focus is on production and services, real-life cases will be discussed from other fields, such as marketing, human resources, finance, etc...

Contents

During the course, both theoretical and practical sessions will be given. The theoretical part focuses on the advantages and disadvantages of different optimization models. The practical part consists of one of a number of well-known cases from literature or the recent research areas of different groups at our university. The students will have to analyze the case study and present solutions.

Initial competences

Operationeel Onderzoek (3e jaar bachelor)

Final competences

- 1 Being able to analyse a practical problem and to translate it into an optimization model.
- 2 Being able to show the advantages and disadvantages of the different solution techniques.
- 3 Being able to use optimization software for the analyses of the problem under study.

Conditions for credit contract

Access to this course unit via a credit contract is determined after successful competences assessment

Conditions for exam contract

This course unit cannot be taken via an exam contract

Teaching methods

Lecture, microteaching, project, seminar: coached exercises

Extra information on the teaching methods

The course is a mixture of theoretical sessions, exercises in groups, and presentations by guest speakers. During the exercise session, students will have to present their results.

Learning materials and price

Research papers from literature (European Journal of Operational Research, Management Science, Operations Research, Journal of the Operational Research Society, etc...) or an integrated case study.

References

- www.informs.org
- Hillier and Lieberman, Introduction to Operations Research, McGraw Hill, 2001
- Hillier and Hillier, Introduction to Management Science: a modelling and case studies approach with spreadsheets, McGraw Hill, 2003

Course content-related study coaching

- The slides and exercises that will be used throughout the sessions will be available over the internet.
- Research papers from literature and from different researchers at our faculty will be part of the course

Evaluation methods

end-of-term evaluation and continuous assessment

Examination methods in case of periodic evaluation during the first examination period

Written examination

Examination methods in case of periodic evaluation during the second examination period

Written examination

Examination methods in case of permanent evaluation

Oral examination, assignment

Possibilities of retake in case of permanent evaluation

examination during the second examination period is possible

Extra information on the examination methods

The final exam consists of two parts: A written exam at the end of the course (50 % of final score) and one or more team works (50 % of final score). The team works consist of a real-life or fictitious case studies that has to be discussed in a written report and an oral presentation. The subjects will be updated yearly and are related to the recent publications in the operations research area.

Calculation of the examination mark

Permanent (50%) and End-of-term (50%) evaluation.