Continuous optimization

Lecturers
Bernard FORTZ (Coordinator) and Dimitrios PAPADIMITRIOU

Course mnemonic
INFO-F524

ECTS credits
5 credits

Language(s) of instruction
English

Course period
Second term

Campus
Plaine

Course content

> Unconstrained optimisation - Constrained optimisation, Lagrangean. - Lagrangean relaxation in combinatorial optimisation - Column generation for linear / integer programming - Interior point methods

Objectives (and/or specific learning outcomes)

Acquiring basic methods in continuous optimisation and their application, being able to model and solve optimisation problems with the right algorithmic tools.

Pre-requisits and co-requisits

Required knowledge and skills

Linear programming (e.g. INFO-F-310)

Teaching method and learning activities

Course and projects

Contribution to the teaching profile

Acquisition of highly specialized and integrated knowledge in optimisation and operations research.

Other information

Place(s) of teaching

Plaine

Contact(s)

Bernard Fortz Campus de la Plaine Bâtiment NO Local 2.N3.203

Evaluation method(s)

Oral examination and Group work

Evaluation method(s) (additional information)

Group project and oral exam

Determination of the mark (including the weighting of partial marks)

50% project, 50% exam.

Main language(s) of evaluation

French and English

Programmes

Programmes proposing this course at the faculty of Sciences

MA-INFO | Master in Computer science | finalité Professional/unit 1 and finalité Professional/unit 2 and MS-BGDA | Specialized Master in data science, Big data | unit U

Programmes proposing this course at the Solvay Brussels School of Economics and Management

MS-BGDA | Specialized Master in data science, Big data | unit U

Programmes proposing this course at the Brussels School of Engineering

MA-IRIF | Master of science in Computer Science and Engineering | finalité Professional/unit 2 and MS-BGDA | Specialized Master in data science, Big data | unit U