Remarque
Les exercices sont donnés à raison de deux heures toutes les deux semaines.

Summary
Introduction to major operations research models and optimization algorithms

Content
Week 1: introduction to the course
Weeks 2 & 3: Linear optimization - introduction
Weeks 4 & 5: The simplex algorithm
Weeks 6 & 7: Networks and transhipment
Weeks 8 & 9: Shortest path and duality.
Weeks 10 & 11: Integer optimization - Branch and bound.
Weeks 12 & 13: Unconstrained non linear optimization.
Weeks 14: Questions and answers.

Learning Prerequisites
Required courses
- Linear algebra
- Analysis

Teaching methods
The course is organized on the concept of "flipped classroom". Each of the six topics spans two weeks. During the first week, the students review the available material (book, videos, exercises). During the second week, the course in the class focuses on difficult aspects, examples, and responses to questions. Exercises are also organized the same way. They are organized in class every over week.

Assessment methods
Written exam

Resources
Bibliography

Videos

- http://A collection of videos are made available to support the self-learning process.