

- Faculté des sciences économiques
- [www.unine.ch/seco](http://www.unine.ch/seco)

## Operations Management (5EN2039)

Filières concernées	Nombre d'heures	Validation	Crédits ECTS
<b>Master in General Management</b>	<b>Cours: 2 ph</b>	Voir ci-dessous	3
<b>Master of Science en innovation</b>	<b>Cours: 2 ph</b>	Voir ci-dessous	3

ph=période hebdomadaire, pg=période globale, j=jour, dj=demi-jour, h=heure, min=minute

### Période d'enseignement:

- Semestre Printemps

### Equipe enseignante

Prof. Dr. Eng. Nicolas Zufferey, GSEM - University of Geneva, [n.zufferey@unige.ch](mailto:n.zufferey@unige.ch)

### Contenu

Session 1: Operations Research & Industry / Linear Programming in Practice.  
 Session 2: Flow models and production problems.  
 Session 3: Additional exercises on Linear Programming and Flows / Questions-Answers.  
 Session 4: Midterm exam (50% of the final mark) / Optimization Projects 1 & Team Building.  
 Session 5: Optimization Projects 2 & Excel Solver.  
 Session 6: Optimization Projects 3 & Lectures.  
 Session 7: Optimization Projects 4 & Project Presentations (50% of the final mark).

### Forme de l'évaluation

- The first part of the course is evaluated with a 90-minute midterm exam (50% of the final mark). The mid-term exam is written and individual. Documents, calculators and computers are forbidden.
- The second part of the course is evaluated with oral presentations (50% of the final mark, as scheduled in the above table).

Neither documents nor connected devices are permitted during the exam. In case of violation of these rules, the students are in a situation of fraud and the unauthorized will be removed. The exam could be deemed as failed.

### Modalités de rattrapage

- The retake exam is a 2-hour written and individual exam that counts for 100% of the grade (during the exam session).

Neither documents nor connected devices are permitted during the exam. In case of violation of these rules, the students are in a situation of fraud and the unauthorized will be removed. The exam could be deemed as failed.

### Documentation

A copy of the slides (but not the ones with solutions) will be provided in PDF format.

There is no compulsory textbook. The student interested in going farther than the course can for example read the following documents.

- F. R. Jacobs, R. B. Chase (2013), Operations and Supply Chain Management, McGraw-Hill.
- R. B. Chase, F. R. Jacobs, and N. J. Aquilano (2004) Operations Management for Competitive Advantage, McGraw-Hill.
- M. Christopher (2016), Logistics & Supply Chain Management, FT Press

### Pré-requis

None.

### Forme de l'enseignement

The professor will alternate between theoretical parts and the modeling/solution of exercises.

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## **Operations Management (5EN2039)**

### **Objectifs d'apprentissage**

Au terme de la formation l'étudiant-e doit être capable de :

- Formulate an optimization problem
- Select efficient solutions
- Define decisions, constraints and goals

### **Compétences transférables**

- Carry out a critical analysis
- Generate new ideas (creativity)
- Develop hands-on, pro forma modelling skills using Excel
- Apply knowledge to new situations