

UE Transport Logistics and Operations Research



Niveau d'étude
Bac +5



ECTS
6 crédits



Crédits ECTS
Exchange
6.0



Composante
UFR IM2AG
(informatique,
mathématiques
et
mathématiques
appliquées)



Période de
l'année
Automne (sept.
à dec./janv.)

- > **Langue(s) d'enseignement:** Anglais
- > **Méthodes d'enseignement:** En présence
- > **Forme d'enseignement :** Cours magistral
- > **Ouvert aux étudiants en échange:** Oui
- > **Crédits ECTS Exchange:** 6.0
- > **Code d'export Apogée:** GBX9CO10

Présentation

Description

Presenting models and tools for solving problems of company location and transport management in a supply chain.

Description:

This course presents two aspects: strategic design of a distribution network in a supply chain and tactical-operational aspects of network management.

For each aspect the course develops two key points:

- in network design, the choice of location and the establishment of services (production site, warehouse, logistics platform) and the synthesis of the transport network (connections / roads between production sites, warehouses, logistics centres)
 - in network management, planning and modes of distribution transport (planning delivery rounds, number and types of vehicles).
- For each of the three problem areas: location, delivery rounds and network design, students will study both modelling and techniques for accurate resolution (Branch-and-Bound) plus techniques for approximate resolutions (Lagrangian relaxation ,

metaheuristics) and how they are set up in commercial software (OPL-CPLEX Studio, Excel solver), or free software (COIN, Ip-solve) or ad-hoc.

Evaluation :

Individual written exam (1/2 of the final mark) and group project (1/2 of the final mark).

Heures d'enseignement

CM/TD

Cours magistral - Travaux dirigés

54h

Période : Semestre 9

Infos pratiques

Contacts

Responsable pédagogique

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Lieu(x) ville

› Grenoble

Campus

› Grenoble - Domaine universitaire