

# UE Academic and industrial challenges



Level  
Baccalaureate  
+5



ECTS  
3 credits



Component  
UFR IM2AG  
(informatique,  
mathématiques  
et  
mathématiques  
appliquées)



Semester  
Automne

- > **Teaching language(s):** English
- > **Teaching method:** In person
- > **Teaching type:** Lectures
- > **Open to exchange students:** Yes
- > **Code d'export Apogée:** GBX9CO09

## Presentation

### Description

This course offers the possibility for the students to gain some experience by facing open/difficult combinatorial problems.

The goal is to model and solve a combinatorial problem with direct industrial applications. We expect the students to take a variety of approaches (local search, compact/extended linear programming formulations, constraint programming, ...) and establish useful results (lower bounds, cuts, complexity,...).

The experimental results will be compared to the litterature (a known academic open benchmark will be available in this case) or will be validated by the industrial partner.

### Course parts

CM Lectures (CM) 18h

**Period :** Semester 9

# Useful info

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## Contacts

Program director

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Program director

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## Place

› [Grenoble](#)

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## Campus

› [Grenoble - University campus](#)