

UE Algorithmic Problem Solving



Niveau d'étude
Bac +4



ECTS
3 crédits



Crédits ECTS
Exchange
3.0



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 :** Travaux dirigés
- > **Ouvert aux étudiants en échange:** Oui
- > **Crédits ECTS Exchange:** 3.0
- > **Code d'export Apogée:** GBX7MO04

Présentation

Description

This course has for objectives to develop proficiencies in algorithms analysis, algorithm writing, and problem solving in general using algorithms.

This course uses Problem Based Learning methods for teaching, so students are expected to work in groups of 5-6 people during class sessions, and will do homework alone between sessions.

Students will solve four big problems during the semester, spanning about 4-6 sessions each. The problems will cover the following topics: advanced data structures (designing data structures to help solving a problem), greedy algorithms, dynamic programming, approximation algorithms, and more importantly the orthogonal notions of algorithm complexity and algorithm quality (in terms of solution produced).

Heures d'enseignement

CM/TD	Cours magistral - Travaux dirigés	33h
TD	TD	9h
TP	TP	6h

Période : Semestre 7

Infos pratiques

Contacts

Responsable pédagogique

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Lieu(x) ville

› Grenoble

Campus

› Grenoble - Domaine universitaire