

## Jeux algorithmiques

**ECTS** : 3

**Volume horaire** : 15

### **Description du contenu de l'enseignement :**

The aim of the course is to analyze optimization problems involving multiple agents, where the actions or decisions of one agent affect not only their own utility but also the utility of others. The behavior of agents, the solutions they reach, and the quality of these solutions can be examined using tools from game theory and optimization.

### **Compétence à acquérir :**

Foundations of Algorithmic Game Theory.

### **Mode de contrôle des connaissances :**

- Brief Written Examination
- Project-Based Assignment

### **Bibliographie, lectures recommandées :**

- Game Theory: An Introduction. Steven Tadelis

<https://press.princeton.edu/books/hardcover/9780691129082/game-theory>

- Game Theory. Michael Maschler, Eilon Solan, Shmuel Zamir

<https://www.cambridge.org/highereducation/books/game-theory/9700752D0339AD14706B5C0FAF34AD9E#overview>

- Algorithms for Decision Making. Mykel J. Kochenderfer, Tim A. Wheeler, Kyle H. Wray

<https://mitpress.mit.edu/9780262047012/algorithms-for-decision-making/>