

Game theory

**ECTS**: 5

Volume horaire: 36

## Description du contenu de l'enseignement :

Volume horaire:

CM: 18h TD: 18h

We study some basic models and results on non-cooperative game theory. The course is divided in five parts:

- 1. Introduction to game theory: Notations and basic concepts
- 2. Zero-sum games: Mixed extension of finite games and their value
- 3. N-player games: Nash equilibrium, their existence and complexity
- 4. Potential games: Congestion games and price of anarchy
- 5. Repeated games: Uniform games and the Folk theorem

## Compétence à acquérir :

The student will know the basic concepts on non-cooperative game theory.

Document susceptible de mise à jour - 10/12/2025

Université Paris Dauphine - PSL - Place du Maréchal de Lattre de Tassigny - 75775 PARIS Cedex 16