

- Faculté des sciences
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Seminar Advanced Topics in Learning and Decision Making (3IN2065)

Filières concernées	Nombre d'heures	Validation	Crédits ECTS
Master en informatique	Cours: 2 ph	Voir ci-dessous	5

ph=période hebdomadaire, pg=période globale, j=jour, dj=demi-jour, h=heure, min=minute

Période d'enseignement:

- Semestre Printemps

Equipe enseignante

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Contenu

This course discusses advanced concepts in learning and decision making under uncertainty, such as:

- Markov decision process theory
- Regret bounds
- Theory of reinforcement learning
- Game theory
- Fairness in decision making
- Stochastic approximation
- Convergence of gradient algorithms

Forme de l'évaluation

In-class presentations and written reviews of research papers

Pré-requis

Solid mathematical background in analysis, algebra and probability theory.

A good background in decision theory and reinforcement learning is assumed. This can be obtained by the course "Reinforcement Learning and Decision Making Under Uncertainty"

Forme de l'enseignement

In-class discussion and presentations.

Objectifs d'apprentissage

Au terme de la formation l'étudiant-e doit être capable de :

- Criticise Research Papers
- Analyse Algorithms
- Explore Scientific Literature
- Present Research Papers
- Generalise Concepts

Compétences transférables

- Explore Scientific literature
- Synthesise Knowledge