

- Faculté des sciences
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### Machine learning and data mining (3IN2011)

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

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

#### Période d'enseignement:

- Semestre Automne

#### Equipe enseignante

Prof. Jacques Savoy  
Prof. Marcelo Pasin

#### Contenu

Introduction to machine learning and data mining concepts, problems and applications; Simple rules generation; Bayesian learning; Decision trees; Associations rules, Methodology of evaluation, Nearest neighbors (and k-NN), Clustering.

The final mark is based on both a final written exam and the results of the practical exercises.

#### References

- Ian Witten, Eibe Frank, Mark Hall, Christopher Pal. Data Mining: Practical Machine Learning Tools and Techniques, 4th ed. Morgan Kaufmann.
- Tom Mitchell: Machine Learning. McGraw Hill.
- Christopher M. Bishop: Pattern Recognition and Machine Learning. Springer.
- Jiawei Han, Micheline Kamber: Data Mining: Concepts and Techniques. Springer.

#### Forme de l'évaluation

Examination two hours

#### Documentation

Copies of the slides available

#### Pré-requis

None

#### Forme de l'enseignement

2 hours of lectures and 2 hours of exercises