

# UE 1.7 Ensemble of Classifiers



Niveau d'étude  
BAC +5



Composante  
UFR Sciences  
et Techniques

## En bref

- › **Langue(s) d'enseignement:** Français
- › **Ouvert aux étudiants en échange:** Non

## Présentation

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### Description

The course is intended to give the students a fairly comprehensive view of fundamentals and techniques for combining multiple classifiers or machine learning models.

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### Objectifs

To master the art of combining classifiers.

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### Pré-requis obligatoires

- UE Apprentissage Automatique du S1
  - UE Théories et Algorithmes d'Apprentissage Automatique du S2
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### Contrôle des connaissances

Contrôle continu

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### Compétences visées

- Multiple Classifiers Systems (motivation, terminology, applications, taxonomy of fusion methods: sequential, parallel, hybrid architectures)
- Combining/fusion operators (class-based, rank-based, measure based; parametric, non parametric; stacking)
- Ensemble of classifiers (diversity in ensembles, cross-validated committees, bagging, boosting, random subspaces, ECOC, random forests and variants, XGBoost)

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## Liste des enseignements

|                         | Nature  | CM | TD | TP | Crédits |
|-------------------------|---------|----|----|----|---------|
| Ensemble of Classifiers | Matière |    |    |    |         |