# UE Natural Language Processing & Information Retrieval

**Niveau d'étude**
Bac +5

**ECTS**
6 crédits

**Crédits ECTS Echange**
6.0

**Composante**
UFR IM2AG (informatique, mathématiques et mathématiques appliquées)

**Période de l'année**
Automne (sept. à dec./janv.)

> **Langue(s) d'enseignement:** Anglais
> **Ouvert aux étudiants en échange:** Oui
> **Crédits ECTS Echange:** 6.0
> **Code d'export Apogée:** GBX9MO75

# Présentation

## Description

The automatic processing of languages, whether written or spoken, has always been an essential part of artificial intelligence. This domain has encouraged the emergence of new uses thanks to the arrival in the industrial field of many technologies from research (spell-checkers, speech synthesis, speech recognition, machine translation, …). In this course, we present the most recent advances and challenges for research. We will discuss discourse analysis whether written or spoken, text clarification, automatic speech transcription and automatic translation, in particular recent advances with neural models.

Information access and retrieval is now ubiquitous in everyday life through search engines, recommendation systems, or technological and commercial surveillance, in many application domains either general or specific like health for instance. In this course, we will cover Information retrieval basics, information retrieval evaluation, models for information retrieval, medical information retrieval, and deep learning for multimedia indexing and retrieval

## Heures d'enseignement

| CM | CM | 36h |
|---|---|---|

## Pré-requis recommandés

Basic knowledge in linear algebra, differential calculus and probabilities

**Période :** Semestre 9

# Infos pratiques

## Contacts

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## Campus

> Grenoble - Domaine universitaire