

Big data and research application

**ECTS** : 3

**Description du contenu de l'enseignement :**

- Data gathering and cleaning, managing integrity and security.
  - Database integration and Data sharing.
  - Data analytics: how to build knowledge
  - How to turn knowledge into economic value and business application.
- This course is an introduction to the processes relied upon by data scientists to turn the potential of the availability of data at a large scale into relevant knowledge to analyze socio-economic or psychological phenomena and turn them into value. The aim is not to train the audience in using these techniques, but to make it familiar enough with them to discuss with data scientists and to be able to understand the potential and limits of knowledge resulting from big data.

**Compétence à acquérir :**

- Understanding of the constraints in gathering, cleaning and organizing data sets.
- Mastering the organizational requirements to manage data bases in a long term and business perspective.
- Critical thinking about the potential and limit of Artificial Intelligence and algorithms.
- Alternative analytical strategies to derive knowledge from big data.

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