

Data Intelligence

TAUGHT IN FRENCH



/ AIMS

In only two years, humanity has produced 90% of all data created. The technological change we are currently experiencing is a fantastic opportunity for anyone interested in processing this data. As the field is expanding, new tools and practices are emerging, involving the production, processing, storage and visualisation of data.

The Data Intelligence major aims at preparing ESEO engineers to be part of this dynamic trend by studying both the software and hardware aspects of these changes.

In addition to Data Management and Data Engineering or Database Architectures and Master Data Management, our training opens up a wide range of possible topics such as artificial intelligence, network and data security, cloud computing or IoT.

/ ACQUIRED SKILLS

As an engineer in Data Intelligence you will be proficient in the different technologies and methods related to the data life cycle. You will be competent in both hardware and database architecture, as well as in extracting, processing and storing data. The strong technical content of this major will prepare you to address various issues related to data processing in the industrial world, with autonomy and efficiency. Also, it will enable you to keep ahead of developments in the sector.

/ CAREER OPPORTUNITIES

Data Intelligence technologies have an impact on a wide variety of economic sectors. As a Data Intelligence engineer you will be capable of joining the IT department of a company and contributing to its protection as a data protection officer or a GDPR consultant, as well as to its management aspects as a CDO, an MDM or a BI manager. You will also be capable of playing a more technical role as data analyst, data engineer, Big Data architect or backend developer, and many more besides.

COURSE UNITS

/ SEMESTER 8

- **Data Intelligence Project:** 98h - 8 ECTS
- **Basics of Optimisation:** 14h - 1.5 ECTS
- **Advanced Database:** 14h - 2 ECTS
- **Data Management:** 14h - 1 ECTS
- **IS Security:** 14h - 2 ECTS
- **IS Architecture:** 14h - 1.5 ECTS
- **Foundations of Big Data:** 42h - 3.5 ECTS
- **Distributed Database Management:** 28h - 2 ECTS
- **Data Analysis:** 14h - 2 ECTS
- **English:** 28h - 2.5 ECTS
- **Transversal Skills:** 28h - 2.5 ECTS

+ **1 selected Course Unit:** 28h - 2.5 ECTS

To be chosen from the elective course units listed below:

- Operational Research
- Biometrics & Cybersecurity
- Human Computer Interactions (HCI)

/ SEMESTER 9

- **Final Year Project:** 168h - 14 ECTS
- **Data Analysis:** 28h - 2.5 ECTS
- **Cloud Computing:** 14h - 1.5 ECTS
- **Data Collection:** 28h - 2.5 ECTS
- **Database Architecture:** 28h - 2.5 ECTS
- **Master Data Management:** 28h - 2.5 ECTS
- **AI for Data Processing:** 28h - 1.5 ECTS

+ **2 selected Course Units:** 56h - 3 ECTS

To be chosen from the elective course units listed below:

- Pentest
- Video games and 3D Rendering
- Quantum Computing
- Blockchain Technologies

