

University Bachelor of Technology (B.U.T.)

Data Science (SD)

The **University Bachelor of Technology in Data Science (SD)** trains technicians capable of assisting in decision-making through data management reporting, statistical analysis, and programming. Graduates are able to collect data ensuring its quality, consistency, security and durability. They can also store it in structured databases ensuring accessibility, transferability, and ease of extraction. Finally, they are capable of performing statistical analyses to produce decision-making tools.

Graduates will go on to work in project mode with a decision-maker, a department of their company or a client to carry out a statistical study. Together they define the objectives and determine which data sets should be analysed. They participate in the selection of the most appropriate statistical methods (from descriptive statistics to construction of models) and programme the chosen analytical method with specialized software. Graduates then synthesize the results and automate the finished product using adapted tools. Finally, they share them via analysis reports and clear, concise presentations.

Study tracks

- The **Statistical Exploration and Modelling study track** aims to train professionals competent in the collection, processing, and statistical analysis of data. Their skills enable them to participate in the determination and collection of relevant data to respond to a given problem. They learn to choose appropriate statistical tools according to the situations encountered, and to implement these tools within the framework of an analysis or model. They then present relevant results in the form of reports, tables and graphs.

Career prospects:

A non-exhaustive list includes: statistical studies manager, statistical developer, data-analyst, statistician, data-scientist, marketing research manager, data analysis and reporting manager, bigdata analyst...

- The **Visualization and Design of Decision-Making Tools study track** aims to train professionals competent in the implementation of all or part of the decision-making process, with the ability to automate different steps of a dedicated solution. Their skills enable them to ensure the management of connections and links to source data, data transformation and cleaning (ETL), and modelling and application of business calculations. Finally, they are well versed in the production of visual restitutions (data-visualization and infographics) through reporting tools and dashboards which are adapted and accessible to non-technical end-users.

Career prospects:

A non-exhaustive list includes: data-analyst, BI developer, analysis and reporting manager, data manager, AMOA project manager, bigdata developer...

Skills

This course aims at developing four core skills for the statistics and business intelligence students:

- **Data processing** for decision-making purposes
- Statistical **analysis** of data
- **Enhancing productions** in a professional context

Graduates also acquire a specific skill depending on the study track they have chosen:

- For the Data Science: Statistical Exploration and Modelling track: **modelling data in a statistical framework**
- For the Data Science: Visualization and Design of Decision-Making Tools study track: **developing a decision-making tool**

Entry requirements

The course is open to baccalaureate students coming from **general or technological background** as well as University students wishing to change degree programme.

Admission is based upon examination of the student's academic file. Some departments may include interviews with students in the selection process.

Furthermore, this course can also be prepared as part of Lifelong training, or even within the framework of a contract employment (under apprenticeship or vocational training contracts). The diploma can also be obtained through Accreditation of Prior Experiential Learning (APEL).

B.U.T. Data Science in France

