

MAPP F FIN465

DATA ANALYTICS FUNDAMENTALS

Number of ECTS credits : 3
Course language : English
Course leader : AUDRAN-LY ANNE
Speakers : DANIEL Hugo

≡ COURSE DESCRIPTION

Big Data, Machine Learning, Artificial Intelligence, those are the words you now hear daily on the general news. Behind the hype and the buzz words lies tools & techniques that can be grasped by undergraduate students. Data Scientist has been declared the best job in America according to Glassdoor, forgetting about her sidekick: the Data Analyst.

≡ COURSE OBJECTIVES

This course will cover the basis of the Python programming language and will quickly dive into the daily tasks of a Data Analyst. The goal is to quickly dive into business cases and learn from real life datasets.

≡ LEARNING OBJECTIVES

C4B learning goal	LG1 - Analysis
C4B learning objective	LO2 - Analyse complex situations
Outcomes	Lev. 3 - Support one's conclusions and issue well-reasoned recommendations

≡ TACKLED CONCEPTS

Big Data, Machine Learning, Artificial Intelligence, Data analysis

≡ LEARNING METHODS

Online course taught by LE WAGON
Every student must have a computer and a good wi-fi connection.

≡ EXPECTED WORK AND EVALUATION

Project on data exploration and visualisation
submitted on the online platform

≡ BIBLIOGRAPHY

≡ EVALUATION METHODS

100 % : Continus Assessment

≡ SESSIONS

1

Introduction to Python

LECTURE & PRACTICAL WORK : 04h00

Data Types & Variables

Control Flow, Conditionals & Loops

Advanced Types

Jupyter Notebook: how to structure a data analysis in Python.

2

Data Exploration & Visualisation

LECTURE & PRACTICAL WORK : 06h00

Numerical recipes with Numpy

Pandas & Dataframes

Data Visualisation

3

Data Sourcing & Cleaning

LECTURE & PRACTICAL WORK : 06h00

Parsing a text file or a PDF

Web Scraping in Python

Getting data from web APIs

Enriching a Dataframe