MAPD_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 sidekiq: 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 reallife 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