Université Paris-Saclay

Share

Email destinataire :

Vous devez renseigner un email valide

Envoyer

Une erreur est survenue. Merci de réessayer ultérieurement

Le mail de partage a bien été envoyé.

Add to Compare

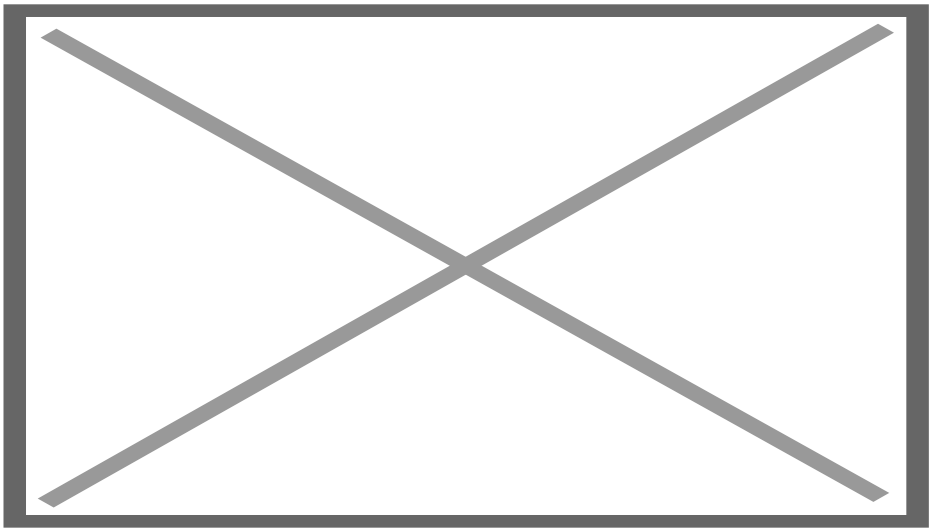
M2 Data Science : Health, Insurance and Finance

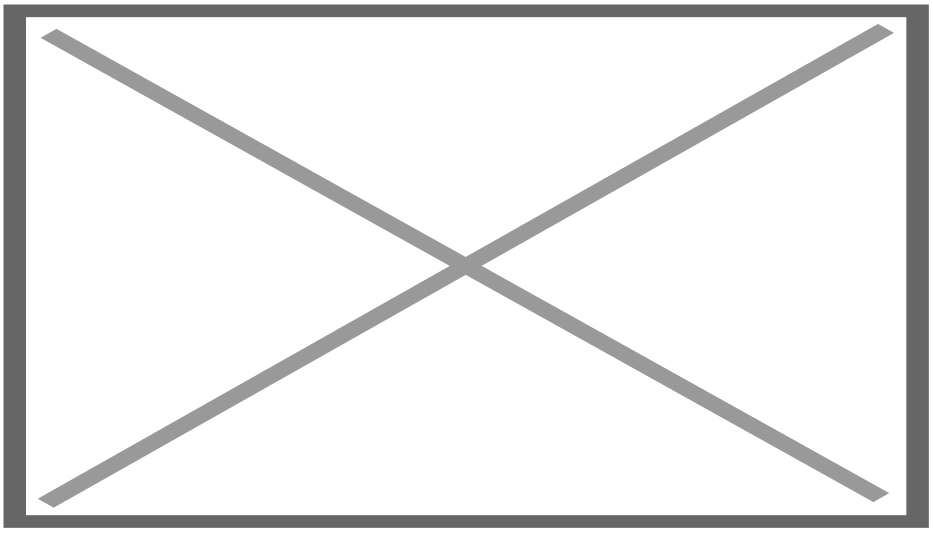
Master's degree
Specialisation Mathematics and applications
Enrolment type
Formation initiale
Language(s) of instruction
English
French

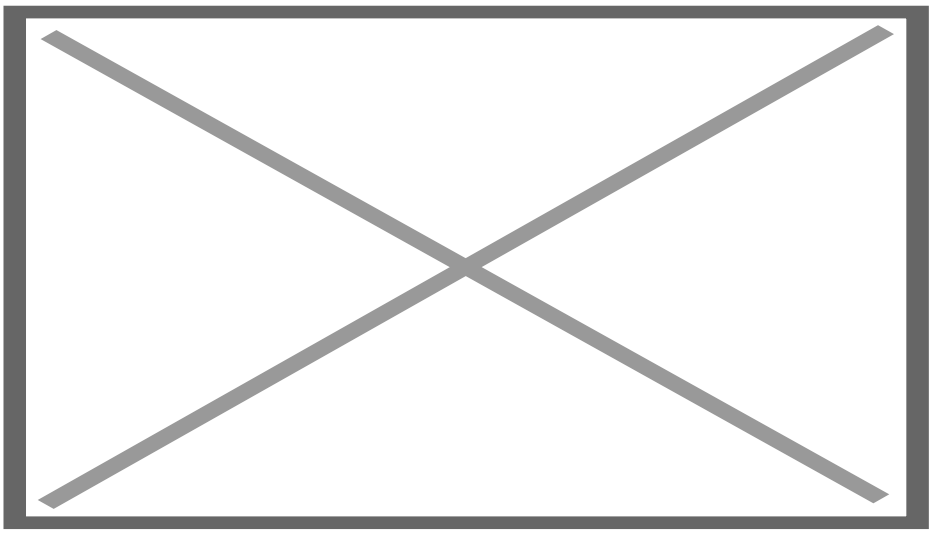
The Master 2, Data Science: Health, Insurance, Finance is a master's degree designed to train students from mathematics and applied mathematics backgrounds in data science (mathematical and computer science aspects) and advanced statistics.

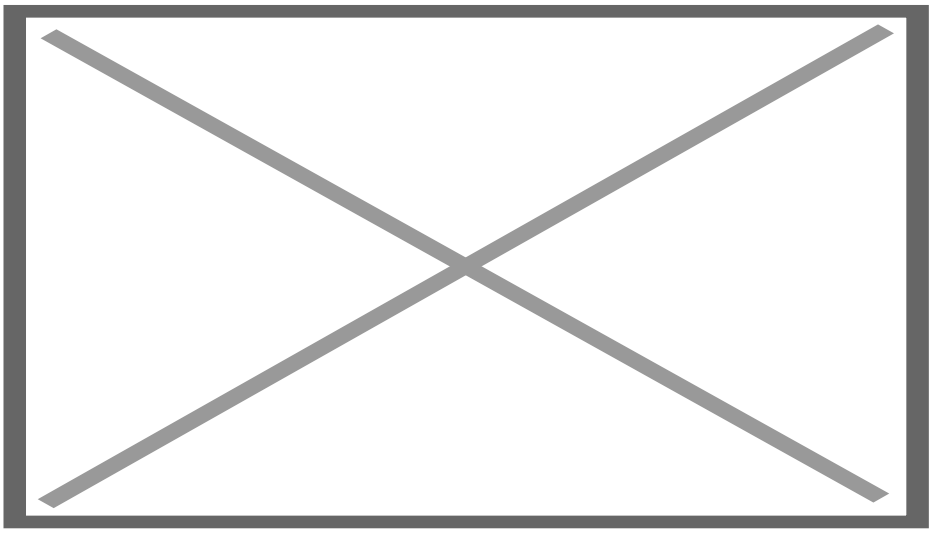
Year organized into 5 blocks that can be compensated for each other, except for the internship

Télécharger la fiche détaillée
Apply Now









Information

- Overview
- Application requirements
- Schedule

Présentation

Skills

- Understand, implement and develop statistical methods (mathematical, digital, statistical learning) for data science, deep learning and high dimensionality * Manage large databases * Select machine learning and statistical algorithms adapted to high dimensionality and relevant to application fields * Develop the computer programmes needed to implement them (python, R, spark) * Share the results obtained with appropriate visualisation tools.

Objectives

+ Train students from mathematics and applied mathematics programs in
data science (mathematical and computer science aspects) and
advanced statistics.
+ Understand and know how to use machine learning and deep learning algorithms
with a focus on three
areas of application (health, insurance, finance).
+ Enable students to acquire in-depth knowledge
of complex signals (data) from these
fields

Calendar

Start of programme (indicative date)
01/09/2026
End of programme (indicative date)
30/11/2027
Admission

Capacity

Available Places

15

Target Audience and Entry Requirements

2nd year Master's Data Science: Health, Insurance, Finance is aimed in particular at 1st year Master's students in mathematics (or equivalent engineering school curriculum), and includes courses in inferential statistics and linear models, probability and stochastic processes, and programming (R and Python).

Période(s) de candidature

Inception Platform

From 05/01/2026 to 10/07/2026

Supporting documents

Compulsory supporting documents

Letter of recommendation or internship evaluation.

Detailed description and hourly volume of courses taken since the beginning of the university program.

Additional supporting documents

Document indicating the list of local M2 choices available here : https://urlz.fr/i3Lo.

Programme

Subjects	ECTS	Semester	Lecture	directed study	practical class	Lecture/directed study	Lecture/practical class	directed study/practical class	distan learni cours
English semester 2	2	Semester 2		10					
Charger le détail									
English Semester 1	2	Semester 1		10					
Charger le détail									

Subjects	ECTS	Semester	Lecture	directed study	practical class	Lecture/directed study	Lecture/practical class	directed study/practical class	dista learn cou
Statistics	6	Semester 1	27	27					
Charger le détail									
Advanced Statistics and Machine Learning	6	Semester 2	24	27					
Charger le détail									
Deep Learning	4	Semester 2	15	15					

Subjects	ECTS	Semester	Lecture	directed study	practical class	Lecture/directed study	Lecture/practical class	directed study/practical class	dista learn cou
Charger le détail									
Bayesian statistic and discrete latent variables	2.5	Semester 1	12	15					
Charger le détail									
Machine Learning/ IA fiable	2.5	Semester 1	10.5	10.5					
Charger le détail									
Dimension reduction (FA+FI)	2.5	Semester 1	9	9					
Charger le détail									

Subjects	ECTS	Semester	Lecture	directed study	practical class	Lecture/directed study	Lecture/practical class	directed study/practical class	d l
Numerical finance and models calibration	6	Semester 1	42						
Charger le détail									
Financial econometrics	3	Semester 1	15	10					
Charger le détail									
Statistics for genetics and genomics (Health option)	2.5	Semester 2	9	9					
Charger le détail									
Introduction to genetics (health option)	2.5	Semester 1	9	9					
Charger le détail									

Subjects	ECTS	Semester	Lecture	directed study	practical class	Lecture/directed study	Lecture/practical class	directed study/practical class	d
Survival and longitudinal data analysis (options health and insurance)	5	Semester 1	10.5	10.5					
Charger le détail									
Bioinformatics (Health option)	2.5	Semester 2	9	9					
Charger le détail									
Machine Learning for insurance and finance (option insurance and finance)	5	Semester 2	18	18					
Charger le détail									

Subjects	ECTS	Semester	Lecture	directed study	practical class	Lecture/directed study	Lecture/practical class	directed study/practical class	distan learni cours
Stage	15	Semestre 2							
Charger le détail									

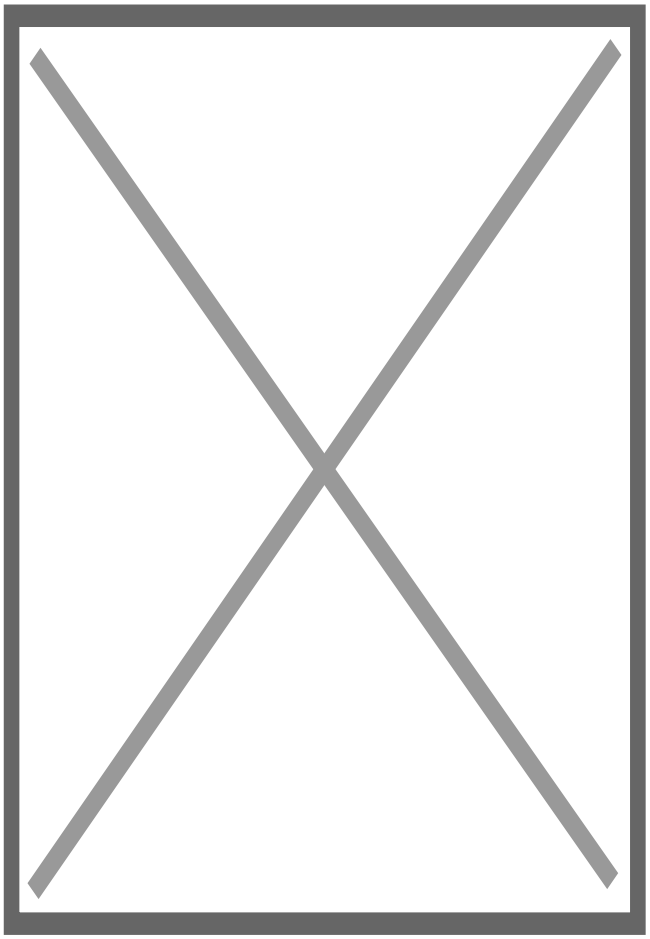
Subjects	ECTS	Semester	Lecture	directed study	practical class	Lecture/directed study	Lecture/practical class	directed study/practical class	dista lear cou
Basic of informatics	2	Semester 1	9	9					
Charger le détail									
Advanced Informatics	4	Semester 2	13.5	22.5					
Charger le détail									
Data Camp	4	Semester 2		9					
Charger le détail									

Teaching Location(s)

EVRY

Training campus

Javascript est requis pour visualiser cette carte.



Evry

Evry
Bus 9105, 4504
RER D Evry Courcouronnes
Voir
Student restaurant (CROUS)
Library
Student residence
Sports facilities

Contact

- **Marie-Luce Taupin**

http://www.universite-paris-saclay.fr/formation/master/mathematiques-et-applications/m2-data-science-sante-assurance-et-finance