Applied Mathematics and Statistics Master's Degree: Data Science pathway

The majority of our courses are taught in French. We invite you to also have a look at the list of courses offered in English at Rennes 2.

This degree offers five national pathways:

- Economic forecasting and prediction (Rennes 1)

- **Data science (Rennes 2)**

- Public assessment and decision-making (Rennes 1 / ENSAI Graduate School for Statistics and Data Science)

- Data science for biology (Agrocampus Ouest)

- Statistics and risk in engineering (INSA (National Institute of Applied Sciences) Rennes)

And an international pathway:

- Statistics for smart data (ENSAI)

Objectives

The development of information systems today makes it possible to produce big and complex data, whose exploitation requires multidisciplinary approaches with a statistical focus.

The Master's Degree in Applied Mathematics and Statistics offers training in these approaches equipping students with common skills in modelling and statistical methods as well as the computational and numerical tools required to implement them.

In addition to these common skills, specific knowledge is offered in each pathway in the second year in the fields of economics, public statistics, data science, biology and engineering.

Course Content

The degree is co-accredited by the following five institutions: University of Rennes 1, University of Rennes 2, Agrocampus Ouest, ENSAI and INSA Rennes.

Year 1 is common to the five standard pathways with the exception of one teaching unit that corresponds to a specialization option: option 1 for Economic Forecasting and Prediction, Public Assessment and Decision-making and option 2 for Data Science, Data Science for Biology, Statistics and Risk in Engineering.

The choice of specialization option determines the student's host institution in year 1: option 1 at Rennes 1, option 2 at Rennes 2.

The second year offers five standard pathways as well as an international pathway (mainly intended for students with a foreign degree, subject to specific enrolment fees).