# MINMATH - Introduction

Introduction

### **MINMATH - Teaching profile**

### Learning outcomes

By the end of the course the student will have strengthened the disciplinary knowledge useful in undertaking a Master in mathematics or in closely related fields.

In particular, he will be capable of :

- choosing and using the fundamental methods and tools of calculation to solve mathematical problems;
- recognise the fundamental concepts of important current mathematical theories. The student will have developed his capacity for abstract thought and his critical spirit and will in particular be able to:

#### o Cours au choix

#### The student will complete the programme with courses chosen from the list shown below, in such a way as to total 30 credits.

🗱 LMAT1223	Differential equations	Heiner Olbermann	ER [q2] [30h+15h] [5 Credits] (1) > English-friendly	x	х
🔀 LMAT1261	Lagrangian and Hamiltonian mechanics	Christian Walmsley Hagendorf	<pre>End [q1] [22.5h+30h] [5 Credits] # &gt; English-friendly</pre>	х	х
🔀 LMAT1323	Topology	Pedro Dos Santos Santana Forte Vaz	<pre>[q1] [30h+15h] [4 Credits] @</pre>	х	x
🔀 LMAT1321	Functional analysis and partial differential equations	Jean Van Schaftingen	FR [q1] [45h+45h] [7 Credits] > English-friendly	x	х
🗱 LMAT1331	Commutative algebra	Enrico Vitale	1812 [q1] [30h+15h] [4 Credits]	х	х
🔀 LMAT1342	Geometry 3	Pascal Lambrechts	FR [q1] [30h+30h] [5 Credits] > English-friendly	x	х
CPHYS2211	Group theory	Philippe Ruelle	[q2] [22.5h+22.5h] [5 Credits] ∰	x	х
🔀 LMAT1236	Introduction to logic: set theory		FR [q2] [30h+15h] [5 Credits] Ø > English-friendly	x	х
🗱 LMAT1237	Introduction to logic: model theory	Enrico Vitale	FR [q2] [30h+15h] [5 Credits] (1) (2) (2) (2) (3) (3) (4) (3) (4) (4) (5) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4	x	х
🔀 LMAT1271	Calculation of probability and statistical analysis	Rainer von Sachs	ER [q2] [30h+30h] [6 Credits] () > English-friendly	x	x
🔀 LMAT1371	Probability Theory				

### **MINMATH - Information**

## Access Requirements

The minor in mathematics is accessible to all Bachelor students whose programme allows it: see the summary table of the different minors.

It is especially recommended to Bachelor students whose major programme contains a solid basic training in mathematics. Particularly concerned are Bachelor students in management, in engineering science: civil engineering, in engineering science: architectural engineer, and in physics.

### **Evaluation**

The evaluation methods comply with the regulations concerning studies and exams. More detailed explanation of the modalities specific to each learning unit are available on their description sheets under the heading "Learning outcomes evaluation method".

### Possible trainings at the end of the programme

Majors-minors which offer direct access to the master(s):

Students with baccalaureates in physical science or engineering science, civil engineering elective or architectural civil engineering elective, will be admitted to the master's in mathematical science, possibly with a program adapted to suit their needs. Any student who is considering this possibility is asked to dd5k contait ac spoit ospossibility is ngs

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