# **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:
  - argue within the context of the axiomatic method.
  - identify the key arguments and the structure of a proof, and also construct a proof independently.
  - evaluate the rigour of a mathematical or logical argument and identify any possible flaws in it.

### **Programme**

### DETAILED PROGRAMME BY SUBJECT

Courses may be spread over the second and third years of the Bachelor programme, while respecting the various prerequisites detailed in the course decriptions.

O Mandatory
Optional
△

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.

### **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 make contact as soon as possible with the conseiller aux études (course adviser) for the department of mathematics.

### Contacts

#### **Curriculum Management**

Entity

Structure entity Denomination Faculty SST/SC/MATH (MATH) Faculty of 467.516 cm BT /F1 8 Tf ics. Particularly UCL - Université catholique de Louvain Study Programme 2024-2025 MINMATH: Minor in Mathematics