Master in Mathematics and applications

Fundamentals mathematics

Presentation

This is a high-level training in fundamental mathematics research. This course is the gateway to contemporary research in fundamental mathematics, in Grenoble. The master 2nd year honors in Mathematics and mathematical applications pathways of the Fourier institute is part of the Graduate school of mathematics, Information sciences and technologies, Computer science and depends on the University Grenoble Alpes. This course is recommended to students from the 1st year of general mathematics, and candidates to the agregation of mathematics, before they perform their tenure.

The objectives are to have an ntroduction to fundamental mathematics research. Preparation for a PhD thesis.

Registration and scholarships

The first year master's is accessible to candidates according to their transcripts (and/or interview) :

- Proof of a national degree conferring the degree of bachelor in a field compatible with that of the master's degree
- Or by validation of studies or acquired experience according to the conditions determined by the university or the training

The second year master's is accessible to candidates according to their transcripts (and/or interview) :

- Having validated the first year of a compatible course - or by validating studies or acquired experience according to the conditions determined by the university or the training

Public continuing education : You are in charge of continuing education :

- if you resume your studies after 2 years of interruption of studies
- or if you followed a formation under the regime formation continues one of the 2 preceding years
- or if you are an employee, job seeker, self-employed

If you do not have the diploma required to integrate the training, you can undertake a validation of personal and professional achievements (VAPP)

Do you want to apply and register? Note that the procedure differs depending on the degree considered, the degree obtained, or the place of residence for foreign students.

Find out which procedure applies to me and apply

Further studies

Doctorate

Practicals informations :

> Component : UFR IM2AG (informatique, mathématiques et mathématiques appliquées)

- level : Baccalaureate +5
- Duration : 2 years
- Course type : Initial and Continuing Education
- Location(s) : Grenoble - University campus

Contacts

Program director

Piau Didier
didier.piau@univ-grenoble-alpes.fr

Gaudoin Olivier
olivier.gaudoin@univ-grenoble-alpes.fr

Program administration

Hamed Abdelouahab Latifa
latifa.hamed-abdelouahab@univ-grenoble-alpes.fr
Phone 04.76.51.47.95

Program

Program under construction - awaiting CFVU vote

Master in general mathematics 1st year

Semester 7

UE Algebra 1	9 ECTS
UE Holomorphic functions	6 ECTS
UE Ordinary differential equations	9 ECTS
UE Statistics	9 ECTS

Semester 8

UE Study and research work	6 ECTS
UE English S8	3 ECTS

5 Option

UE Algebra 2	6 ECTS
UE Differential and dynamic geometry	6 ECTS
UE Functional Analysis	6 ECTS
UE Stochastic processes	6 ECTS
UE Introduction to cryptology	3 ECTS

Master 2nd year

Semester 9

2 option(s) to choose from 3

UE Partial differential equations	12 ECTS
UE Spectral and semiclassical analysis	12 ECTS
UE Riemannian Geometry	12 ECTS

1 option(s) to choose from 2

UE Mathematical fluid mechanics	6 ECTS
UE Classical and quantum chaos	6 ECTS

Semester 10

UE Research internship	27 ECTS

1 option(s) to choose from 2

UE English	
UE LaTeX	3 ECTS