

Fundamentals mathematics

Master in Mathematics and applications



Duration
2 years



Component
UFR IM2AG
(informatique,
mathématiques
et
mathématiques
appliquées)



Language(s) of
instruction
French, English

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 introduction to fundamental mathematics research. Preparation for a PhD thesis.

International education : Internationally-oriented programmes

International dimension

Internationally oriented training

Organisation

Admission

Access conditions

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).

Candidature / Application

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

Fees

Tuition fees : 243 €

And after

Further studies

Doctorate

Targeted trades

- Mathematician in research and development teams
- Faculty member
- Mathematical engineering professions: risk management, modeling, optimization, data analysis ...

Useful info

Contacts

Program director

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Program director

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Course location(s) - City

📍 Grenoble

Campus

🏠 Grenoble - University campus

Program

Master in general mathematics 1st year

Semester 7

	Nature	CM	TD	TP	Crédits
UE Algebra 1	Teaching Unit (UE)	26h	45,5h		9 credits
UE Holomorphic functions	Teaching Unit (UE)	19,9h	29h		6 credits
UE Ordinary differential equations	Teaching Unit (UE)	26h	45,5h		9 credits
UE Scientific English	Teaching Unit (UE)		24h		3 credits
UE Statistics	Teaching Unit (UE)				3 credits

Semester 8

	Nature	CM	TD	TP	Crédits
UE Study and research work	Teaching Unit (UE)		25h		3 credits
UE Algebra 2	Teaching Unit (UE)	19,5h	29h		6 credits
UE Differential and dynamic geometry	Teaching Unit (UE)	19,5h	29h		6 credits
UE Functional Analysis	Teaching Unit (UE)	19,5h	29h		6 credits
UE Stochastic processes	Teaching Unit (UE)	19,5h	29h		6 credits
UE Computer algebra and cryptology	Teaching Unit (UE)			15h	6 credits

Master 2nd year

Semester 9

Semester 10

	Nature	CM	TD	TP	Crédits
UE Research internship	Teaching Unit (UE)				27 credits
UE English	Teaching Unit (UE)				
UE LaTeX	Teaching Unit (UE)				3 credits