

Master in Civil engineering

Applied Mechanics 1st year

Presentation

The 1st international year, 'Applied Mechanics', totally common to both programmes of Civil Engineering and Mechanics and which opens on three international courses, including GCER for the second year.

This Master Course gives you the opportunity to apply to the UGA Graduate School and one of its 15 thematic programs. The Graduate School@UGA is a new training program through and for research which was launched in 2021 within the Université Grenoble Alpes, and which concerns all the schools and components of the UGA. The objective of these thematic programs is to offer interested students an interdisciplinary training program and academic excellence combining university studies and laboratory internships. Each thematic program develops a specific line of research, allowing then to embark on a PhD, or to have a direct professional insertion. The program regroups students registered in different mentions, master programs or engineer school tracks and working together in specific courses.

Participation in the Graduate School@UGA is for two years (M1 and M2) and may open the possibility of obtaining an academic scholarship for two years for the best international students (non-French baccalaureate holders).

For more information : <https://www.univ-grenoble-alpes.fr/education/graduate-school/>

Registration and scholarships

Access conditions

The first year of master's degree is accessible on file (and / or interview) to candidates with a national diploma conferring the degree of license in a field compatible with that of the master or via a validation of studies or acquired according to the conditions determined by the university or training. The second year is accessible on file (and / or interview) to candidates who have validated the 1st year of a compatible course or through a validation of studies or acquired under the conditions determined by the university or 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 \(VAPP\)](#)

[skin.odf-uga:SKIN_ODF_CONTENT_PROGRAM_CANDIDATURE_LABEL](#)

You want to apply and sign up for a master ? Please be aware that the procedure differs depending on the diploma you want to take, the diploma you have already obtained and, for foreign students, your place of residence

Let us be your guide – simply follow this [link](#)

Expenses

Tuition fees 2021-2022 : 243 €

Practicals informations :

- > Component : UFR PhITEM (physique, ingénierie, terre, environnement, mécanique)
- > level : Bacalauréate +4
- > Duration : 1 year
- > Course type : Initial and Continuing Education
- > Location(s) : Grenoble - University campus

Contacts

Program director

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Program administration

Registrar's Office for the Master in Civil Engineering
phitem.master.gc@univ-grenoble-alpes.fr

Application

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Continuing education manager

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Program

Program under construction - awaiting CFVU

Master in Applied mechanics 1st year

Semester 7

UE Solid mechanics	3 ECTS
UE Experimental techniques and methods 1	3 ECTS
UE Numerical methods in solid and fluid mechanics 1	3 ECTS
UE Image and signal processing	3 ECTS
UE Fluid mechanics	3 ECTS
1 option(s) to choose from 1	
UE English	3 ECTS
UE French as a foreign language	3 ECTS
2 option(s) to choose from 2	
UE Mechanics of material	3 ECTS

UE Physics of granular media	3 ECTS
UE Multiphysical couplings (THCM)	3 ECTS
UE Convection in industrial and geophysical flows	3 ECTS
UE Instabilities and turbulence	3 ECTS
UE Basic geomechanics	3 ECTS
UE Wave in fluids	3 ECTS
UE Environmental flows	3 ECTS
UE Introduction of geophysical fluids dynamics	3 ECTS
UE Plastic analysis of structures	3 ECTS
GS_GREEN_UE Climate and Energy for a Sustainable Transition	3 ECTS
1 option(s) to choose from 1	
UE Research project 1	6 ECTS

GS_Soft-Nano_UE-Research Methodologies	6 ECTS
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Semester 8

UE Experimental techniques and methods 2	3 ECTS
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UE Numerical methods in solid and fluid mechanics 2	3 ECTS
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1 option(s) to choose from 1

UE English	3 ECTS
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UE French as a foreign language	3 ECTS
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3 option(s) to choose from 3

UE Mechanics of material	3 ECTS
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UE Physics of granular media	3 ECTS
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UE Multiphysical couplings (THCM)	3 ECTS
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UE Convection in industrial and geophysical flows	3 ECTS
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UE Instabilities and turbulence	3 ECTS
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UE Basic geomechanics	3 ECTS
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UE Wave in fluids	3 ECTS
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UE Environmental flows	3 ECTS
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UE Introduction of geophysical fluids dynamics	3 ECTS
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UE Plastic analysis of structures	3 ECTS
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GS_GREEN_UE_Energy Systems for the Transition	3 ECTS
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1 option(s) to choose from 2

UE Research Internship M1 AM	6 ECTS
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GS_Soft-Nano_UE_Internship	6 ECTS
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UE Research project 2	12 ECTS
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