Contacts

UNIVERSITÉ DE PAU ET DES PAYS DE L'ADOUR

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https://formation.univ-pau.fr/m-green-mppm

Head of the program

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International Welcome Desk

http://univ-pau.fr/en/welcome-desk

Access to graduate program

Requirement

- The GREEN Graduate school is open to high-potential students from a variety of scientific backgrounds who have completed their undergraduate training with the highest honors (special fees could be offered to promising candidates) and are highly motivated for a dedicated research-focused PhD-Track.
- Applicants must hold a Bachelor (Science or Engineering) in Mechanics, Physics, Civil engineering or equivalent. Strong eager to research is mandatory.
- Applicants must be fluent in English, both in writing and speaking.
  A non-native English candidate must pass an internationally recognised English test or an English interview with our lecturers.
  Minimum required score CECRL B2 level in English.

Apply

- Application on Mobility on line: **https://ri.univ-pau.fr/m-programs**

Assets

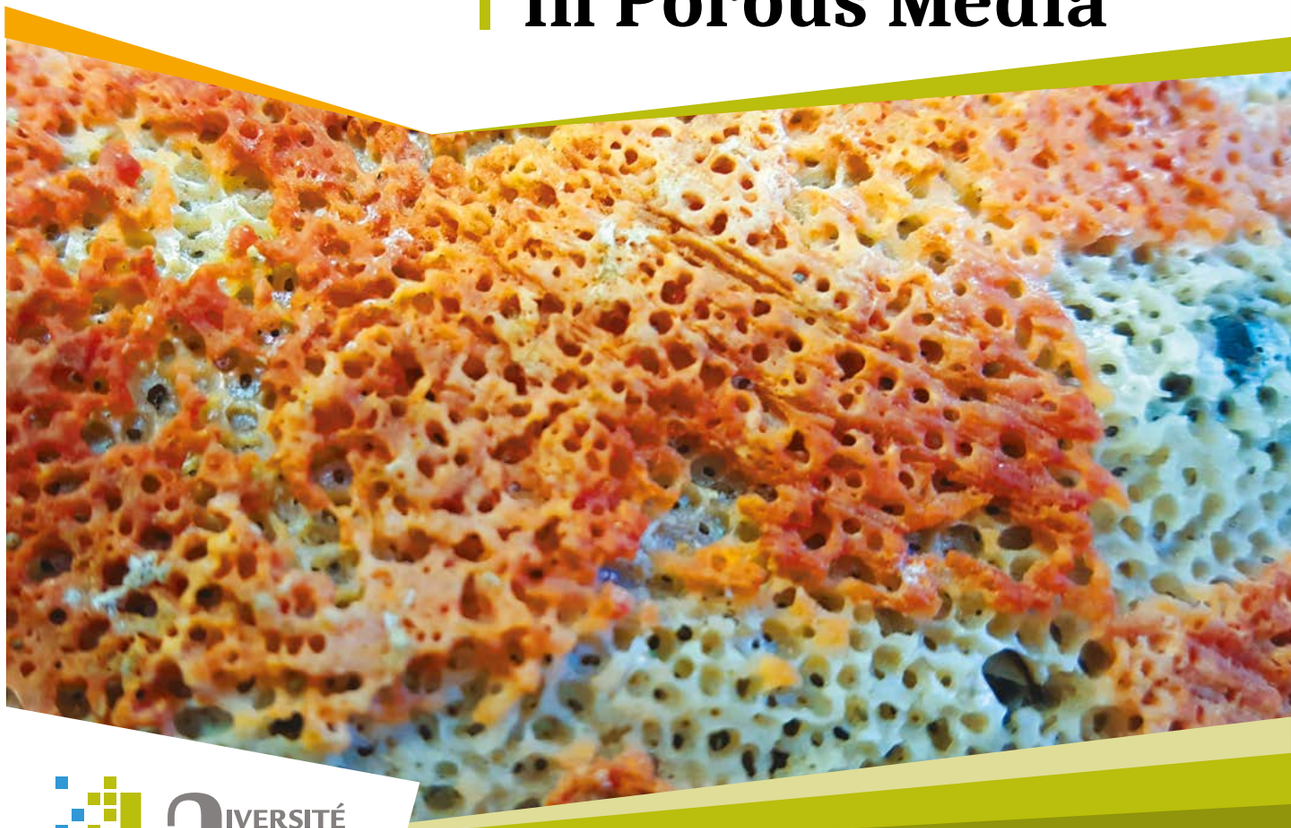
- Scholarships
- Training in English
- More than one third of ECTS acquired in research
- Integrating research laboratories right from the 1st semester of M1
- Multidisciplinary culture
- Continuation into a thesis if the criteria of excellence are recognised
- Tutorship and tailor-made programs: each student will have a tutor with who will build with his curriculum related to his aspirations and research interest. The tutor will also help the student define a series of face-to-face or e-learning courses (up to 20 or 25% for the STEE GP) that s/he can easily keep up with.

Conception : Direction de la communication - Impression : Centre de reprographie - UPPA - Février 2023

GRADUATE SCHOOL GREEN

Graduate program MPPM

Mechanics and Physics in Porous Media



UNIVERSITÉ DE PAU ET DES PAYS DE L'ADOUR
COLLÈGE STEE

https://formation.univ-pau.fr/m-green-mppm

Presentation

In 2022-2023, the UPPA is opening a 5-year integrated Master's/PhD program of excellence linked to the research fields of Energy and the Environment with research-intensive training in multiple fields.

The GREEN graduate school (GRaduate school for Energetic and Environmental iNnovation) aims to train tomorrow's research managers, for them to be enlightened about the challenges of energy and the environment, capable of understanding their complexity and proposing innovative solutions to face the challenges of transitions.

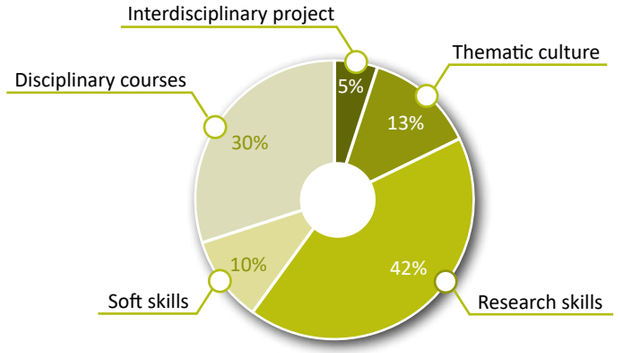
Research-based approach

The program is carried out in close collaboration with the LFCR laboratory (UMR5150) where numerical and experimental tutorials will be performed. Students are integrated in the local research environment. They benefit from the G2MP facilities (numerical and experimental platforms) and assist to the scientific seminars of the research teams.

Graduate program

Interdisciplinarity and Research immersion in laboratories

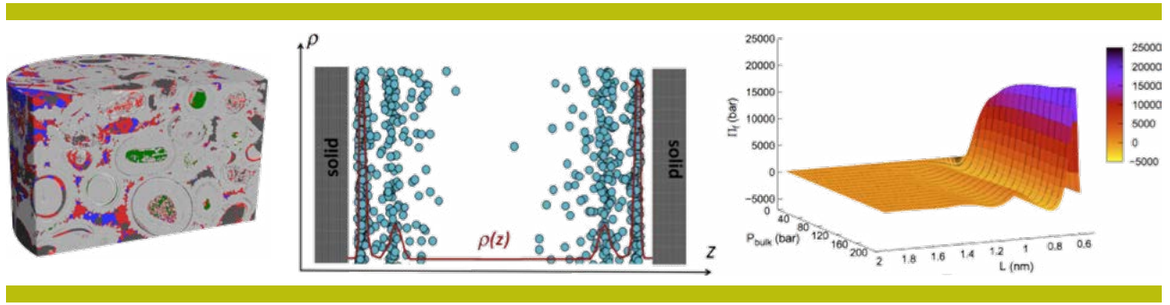
In order to promote transversal and interdisciplinary activities, all the Graduate Programs proposed by GREEN are identically structured. In addition to the research training which represents 40% of a Master's credits, the courses offered in each GP are a combination of common thematic culture courses in the field of Energy and Environment (Sustainability Science, Resilience Alliance, Ecological Economics and Political Ecology, Health & Ecotoxicology, Energy Law & Policy.....) and basic soft skills completed by fundamental and specialized disciplinary courses to fit with the research or topic interest of the students.



Training by project

The research-based training program of our GREEN project follows the active educational approach of "student-based learning". The aim is to guide our students and help them structure their research and innovation projects, while giving them a great deal of autonomy.

In the second year, there is therefore a significant reduction in the number of face-to-face courses in favour of project-based learning, in order to put students in a professional situation so that they can experiment group work and project management. This framework encourages a strong interaction between students, lecturers, and researchers to ensure an easier integration into the host research laboratories. The interdisciplinary project proposed in the third semester should give students from all the graduate programs an opportunity to produce joint, multidisciplinary work.



Graduate program MPPM

Mechanics and Physics in Porous Media

Understanding the mechanics, the physics and their couplings appearing in fluid-filled porous media is a key stone for solving forthcoming challenges in Energy and Environment. Indeed, porous media are ubiquitous in many natural and industrial systems of interest in various field of engineering such as: Civil Engineering, Mechanical Engineering, Chemical Engineering, Material Engineering, Petroleum Engineering, or Food Industry, to mention only a few.

The MPPM course focuses on the Mechanics and Physics in Porous Media. It encompasses their experimental characterisation by indirect porosimetry and direct imaging, the poromechanical behaviour modelling, the transport properties estimation, the fluid-solid couplings and the properties of confined fluids in porous media.

This Graduate program degree offers multidisciplinary key courses to achieve an advanced specialist level in all areas involving porous media. It is suited for students planning both an academic or an industrial career and provides the theoretical basis and the practical expertise required to pursue in academic research or R&D structures.

Training content : *https://formation.univ-pau.fr/m-green-mppm*

Opportunities

Sector

- Civil engineering
- Mechanical engineering
- Material engineering
- Chemical engineering
- Petroleum engineering

Fields

- Research
- R&D structures

Positions

- Lecturer Researcher
- R&D Engineer