



SCIENCE, TECHNOLOGY, HEALTH

GREEN Graduate program "Evolutionary ecology in aquatic environments (EEAE)"



ECTS
120 credits



Duration
2 years

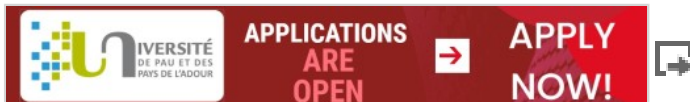


Component
Collège
Sciences et
Technologies
pour l'Energie et
l'Environnement
(STEE)



Language(s)
English

Presentation

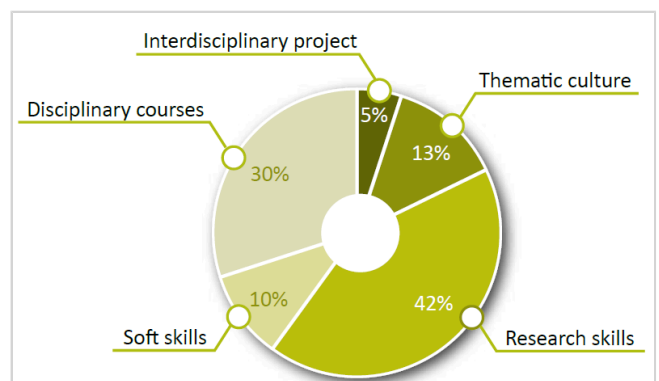


Aquatic ecosystems are both highly diverse and threatened by anthropogenic disturbances such as pollution, global change, eutrophication, harvesting, habitat loss, and fragmentation. These disturbances can have selective effects, or interact with selective factors, in a way that can impact evolutionary processes.

As these processes may either promote population resistance/resilience through adaptation or accentuate the threat through maladaptation, understanding evolutionary forces at work in natural and disturbed aquatic environments is paramount to assessing the fate of biodiversity and managing it in a sensible way in the long term.

loss of biodiversity. As evolutionary processes may be difficult to document and are still not widely accounted for in the management of aquatic ecosystems, the graduate program is strongly research-oriented.

The disciplinary courses will deal with theoretical aspects of evolutionary ecology and empirical methods linked to its study in aquatic ecosystems. Through individual and group projects, students will mix fundamental knowledge and management application to reach their own blend of evolutionary ecology in aquatic environments.



Objectives

This graduate program aims at training scientists who will be able to apply fundamental knowledge of evolutionary ecology in order to tackle the challenge of human-driven

Your university



Additional information

Scholarships

- * Region Aquitaine Scholarships for non-EU students
- * E2S Talents' Academy Scholarships for all students
- * EIFFEL Scholarship of Excellence
- * Specific Master's scholarship

The International Master Programs Admission Office

master.programs@univ-pau.fr

Organisation

Organization

- * **Evolutionary ecology & management implications** (40h): where you browse various key concepts in evolutionary ecology (sexual selection, habitat choice, local adaptation) through their implications for the management of populations or biodiversity
- * **Demogenetic dynamics in a changing environment** (30h): where you model demo-genetic feedback loops to quantify the ability of populations to thrive and adapt in environments that change naturally or because of human-induced alteration.
- * **Phenotypes facing climate change** (24h): where you explore the effect of climate change on thermal adaptation and life-history evolution.
- * **Eco-evolutionary feedback in aquatic communities** (38h): where you merge within-population phenotypic adaptation and community structure to understand how they mutually shape each other.
- * **Bayesian inference for eco-evolutionary processes** (20h): where you model complex ecological datasets in an approach that explicitly untangles biological and observation processes.
- * **Evolutionary genomics** (12h): where you seek traces of diversity in genomic data and interpret them as ecological adaptation

- * **Journal club and synthesis** (30h): where you dive into primary literature (both classic papers and fresh from the lab) and emerge with a synthetic view of evolutionary ecology.

Trainings

Internship : Mandatory

Internship duration : 6 months/year

Admission

Admission requirements

ENGLISH LANGUAGE REQUIREMENTS

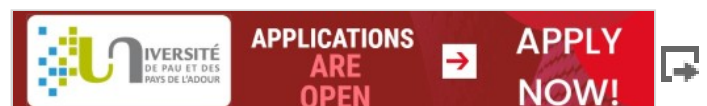
Applicants must be fluent in English, both in writing and speaking. An applicant whose native language is not English has to take a recognized international English test.

Minimum required score: CECRL B2 | 🇬🇧 level in English

ACADEMIC REQUIREMENTS

Applicants must hold a Bachelor's degree in Biology/ Ecology. Eagerness for research is crucial, and endorsement by a research laboratory prior to application is much appreciated.

How to apply





Tuition Fees and partial exemptions

Administrative tuition in France is determined at a national level. The French Ministerial Order of April 19, 2019, amended on June 9, 2020, sets university tuition for a Master's Program as follows: European nationals: **€243**, extra-European nationals: **€3770**.

For the academic year 2022-2023, the Board of Directors has extended its policy of automatically providing a **partial reduction of these fees at the UPPA**. As a result, extra-European nationals will be granted automatic partial reductions such that **they will be able to pay the same enrollment fees as European nationals**.

Extra fees:

In addition to academic tuition, most students must pay a student body fee (CVEC, which cost €92 in 2020-2021).

*NB: Admitted candidates in any course of study who have taken a break of more than two years from their studies will enroll via the UPPA's **Continuing Education service** (Formation Continue / FORCO). They are exempt from the CVEC, however, they may be subject to a different tuition scale.*

And after

Further study

Sectors

- * Evolutionary ecology,
- * Adaptation to global change,
- * Biodiversity management,
- * Fisheries regulation.

Fields

- * Research & development,
- * Research

Positions

- * Lecturer,
- * Researcher,
- * Project manager

Useful info

Contacts

Head of Teaching

Cédric Tentelier

✉ cedric.tentelier@univ-pau.fr

Partner laboratories

Ecobiop

🔗 <https://ecobiop.com/>

Group of Stream Ecology @ UPV/EHU

🔗 <https://www.ehu.eus/streamecology>

Freshwater Research Group @ UC Berkeley

🔗 <https://vcresearch.berkeley.edu/taxonomy/term/1219>

International Lab MacLife

🔗 <https://liamaclife.org/>

Place

📍 Anglet

Campus

🏠 Anglet