Université de Strasbourg

Sciences, Technologies, Santé | 2025-2026

DIPLÔME NATIONAL DE MASTER CONTRÔLÉ PAR L'ÉTAT

Master Sciences de la Terre et des planètes, environnement
Water Resources and Management (UFAZ) (délocalisé en Azerbaïdjan)

Présentation

Le changement climatique, la gestion des risques naturels, le développement des énergies décarbonées pour la transition énergétique, la recherche et la gestion de la ressource en eau, la lutte contre les pollutions, la caractérisation du sous-sol préalable à toute installation d'infrastructure… ouvrent de nombreuses perspectives d'emploi aux diplômés en master des sciences de la Terre et de l'environnement pour les prochaines décennies.

Le master mention STPE de Strasbourg propose trois parcours centrés sur les problématiques environnementales ouvert à l'alternance (ISIE), l'utilisation des géosciences pour la transition énergétique (GeOT), et un parcours qui vise des métiers en lien avec une compréhension globale du système Terre, les risques naturels et les ressources minérales (GDT). Le parcours recherche pour les ingénieurs est ouvert aux élèves ingénieurs. Le parcours Geosciences (UFAZ) est délocalisé en Azerbaïdjan.

Objectifs

Ce parcours est proposé exclusivement dans le cadre de l'UFAZ (Université franco-azerbaidjanaise) et est entièrement délocalisé à Bakou.

This two-year master program is dedicated to training specialists in the analysis and management of water resources who will be able to work in the world of academic research, higher education and local or international companies. The level of expertise targeted will enable innovative development and decision support on water management. The interdisciplinary approach will provide an integrated vision of water resources and enable sustainable management in line with societal issues and environmental changes. The program combines lectures, practical work and field training. It requires strong background in earth sciences, including geology, hydrology and geochemistry but also in mathematics and computer programing. Teachers are professors from various French universities, supplemented by specialized courses given by local professionals (Azersu, Agro Economics research Center, Ministry of Ecology) and experts from European organizations (International office of water, Caspisnet).

The master program is organized around three main axes:

- 1) **Resources of natural water** through a hydrogeological approach;
- 2) **water quality** through chemical/biological indicators and sanitation techniques;
- *3) **management of water resources** in relation to socio-economic issues and sustainability.*

Métiers visés

Pour connaitre en détail l'insertion professionnelle de nos diplômés, consultezcette page.

Candidater

Azerbaidjani applicants:

See application process and entrance exam details here.

International applicants :
We can accept at most 8 international students per year into the UFAZ Master's program (which has 3 specialities, one of which is Geoscience), and the tuition fee for international students is 5000 $. The program is taken exclusively at the Baku UFAZ campus (two completely renovated buildings within walking distance of the city center). International students will be offered accommodation here unless they wish to make their own plans for accommodation. The deadlines for international applications have not yet been finalised. The application process will be on the basis of a written application complete with CV, cover letter, grades from bachelor program etc. There may also be an interview. Please take a look at the equivalent process for the UFAZ bachelor program

Composante	• École et observatoire des sciences de la Terre (EOST)
Langues d'enseignement	• Anglais
Niveau d'entrée	BAC +3
Durée	2 ans
ECTS	120
Formation à distance	Non, uniquement en présentiel
Régime d'études	• FI (Formation initiale)
Niveau RNCP	Niveau 7
RNCP	• RNCP39700 : Master Sciences de la Terre et des planètes, environnement
Lieu	Bakou - Azerbaïdjan
Campus	• Campus Bakou
Formation internationale	Formation ayant des partenariats formalisés à l'international
Lieu(x) à l'étranger	Bakou - Azerbaïdjan
Stage	Non
Alternance	Non

Contacts

Responsable(s) de parcours

- Damien Lemarchand

here. You may use the contact address on that page to let the UFAZ administration know you would be interested in applying and are waiting for the procedure for international applicants to be published to send in your application.

Prérequis obligatoires

Students must have a strong background in earth sciences and in mathematics. They must be hard-working, highly motivated and fluent in English. They should be curious and open to interdisciplinary approaches.

Programme des enseignements

Water Resources and Management (UFAZ) (délocalisé en Azerbaïdjan)

Master 1 - Sciences de la Terre et des planètes, environnement - Water Resources and Management (UFAZ)

M1S1 - Water Resources and Management (UFAZ)					
		CM	TD	TP	CI
Water Resources 1	9 ECTS	-	-	-	72h
Water Cycle and Hydrology		-	-	-	24h
Statistics in Hydrology		-	-	-	24h
Water and Climate Change		-	-	-	24h
Water Resources 2	9 ECTS	-	-	-	72h
Free-surface Hydraulics		-	-	-	24h
Hydrogeology		-	-	-	24h
Water in Azerbaijan		-	-	-	24h
Transversal Skills 1	12 ECTS	20,5h	33,5h	9h	39h
Geographical Information Systems		4h	20h	-	-
Societal Issues and Challenges		-	-	-	24h
Applied Programming in Python		12h	9h	9h	-
Writing in the Sciences		4,5h	4,5h	-	-
Communication & Management		-	-	-	15h

M1S2 - Water Resources and Management (UFAZ)					
		CM	TD	TP	CI
Water Resources 3	9 ECTS	19,5h	4,5h	-	48h
Groundwater Flow Modeling		-	-	-	24h
Geochemical Modeling 1		-	-	-	24h
Environmental Geosciences		19,5h	4,5h	-	-
Quality & Engineering 1	9 ECTS	-	-	54h	48h
Water Monitoring and Sampling		-	-	-	24h
Water Supply and Sanitation		-	-	-	24h
Field Work		-	-	30h	-
Transversal Skills 2	6 ECTS	1,5h	6h	24h	-
Research Project		1,5h	6h	-	-
Soil and Water Lab – Practical Work		-	-	24h	-
Management 1	6 ECTS	-	-	-	48h
Urban Water Management		-	-	-	24h
Water and Agriculture		-	-	-	24h

M2S3 - Water Resources and Management (UFAZ)

		CM	TD	TP	CI
Quality & Engineering 2	9 ECTS	-	-	-	72h
Contaminants in Water and Soil		-	-	-	24h
Ecohydrology		-	-	-	24h
Water and Civil Engineering		-	-	-	24h
Transversal Skills 3	6 ECTS	-	-	-	48h
Artifical Intelligence Applied to Hydrology		-	-	-	24h
Remote Sensing for Hydrology		-	-	-	24h
Management 3	9 ECTS	-	-	-	72h
Sustainable Water Resources Management and Planning		-	-	-	24h
Project Management		-	-	-	24h
Water Policy and Economics		-	-	-	24h
Water Resources 4	6 ECTS	-	-	18h	30h
Geochemical Modeling 2		-	-	-	24h
Near-surface Water Exploration		-	-	18h	6h

M2S4 - Water Resources and Management (UFAZ)

		CM	TD	TP	CI
Research or Industry Internship	30 ECTS	-	-	-	-
Research or Industry Internship		-	-	-	-