

MA in Environmental Protection Specialization: Ecohydrology

Institution	UNESCO Chair on Ecohydrology and Applied Ecology, Faculty of Biology and Environmental Protection, University of Lodz
Name of the programme	Environmental Protection, specialization: Ecohydrology
Degree to obtain	MA in Environmental Protection
Duration	4 semesters (2 academic years)
Language of instruction	English
ECTS points	120
Programme description	MA in Ecohydrology aims to create highly specialized professionals in the area of Ecohydrology (EH). Ecohydrology (EH) is a sub-discipline of hydrology that seeks to understand the ecological processes controlled by the hydrological cycle. Domains concerned: Water Sciences: ecohydrology, water, environment, enhancement of the catchment sustainability potential, ecohydrological biotechnologies, nature-based solutions an systemic solutions -WBRSC+E (Water, Biodiversity, Resilience, ecosystem Services, Cultural heritage, Education). Graduate profile: • describes the link between ecology and hydrology and applies it as a management tool for protection and sustainable use of the natural environment, in context of modern methods and ecohydrological biotechnologies, and with consideration of current environmental policy • determines the ecological processes that support the resilience of aquatic ecosystems and plans how to harmonize them with existing engineering infrastructures at the river basin scale, to achieve sustainable aquatic ecosystems use and to reverse the processes of human caused degradation • uses an holistic perspective of freshwater ecosystems functioning, under natural and anthropogenic pressures, and by this regulates ecological processes based on understanding of the "water-biota interactions", from a molecular (e.g., microbial loop) to an ecosystem (biomanipulation), and then to a landscape scales (reforestation, creation of land/water ecotonal buffer zones) • estimates the social and economic values of aquatic ecosystems, and develops the research and applications required to support and implement conservation and adaptation measures for the sustainable management of aquatic environments • applies advanced tools in the planning, conception and design phases of ecohydrological projects

	 uses communication and research skills for integrated team work, decision supporting systems for community policy, and for creation the interface between researchers, stakeholders and decision makers. Study subjects: Ecohydrology 2. Environmental Modelling and Statistics Ecotoxicology 4. Environmental / Landscape Planning Environmental Protection Politics 6. Ecological Risk Assessment Applied Aquatic Ecology 8. Applied Hydrology Urban Ecohydrology 10. Phytotechnologies & Phytoremediation Wetlands & Land-Water Ecotones 12. Ecohydrology for Sustainable Fisheries & Aquaculture 13. International Water Resources Law Environmental GIS 15. Bioindicators 16. Eutrofication Symptoms Control 17. Watershed Pollution Control 18. Hydroacoustic in Fisheries & Ecology 19. Fish-based Assessment & River Restoration 20. Long-term Ecological Research 21. Trophic Relationships in Reservoirs Thesis Seminary; Thesis Laboratory; DIPLOMA WORK Part of the study programme will be realized in frame of the ERASMUS MUNDUS Master in Applied Ecohydrology (MAEH) that started in 2021 (2021-2026, 4 editions with scholarships) in cooperation with the
	University of Algarve (Portugal), University of Lubeck (Germany), and University of Antwerp (Belgium). See https://maeh-mundus.eu/
Tuition	3 000 Euro
Deadline for application	15 July 2022
Requirements	Please note that there is an ongoing change of regulations at the University of Lodz (due to the reform of state Law on Higher Education and Science) and there may be some amendments to admission rules in 2022. The following documents are required (among others): (1) higher education (Bachelor) diploma or Master degree (in one of the following subjects: biology, ecology, geosciences, environmental protection, limnology, hydrology, aquatic engineering or any similar subject) (2) transcript of records showing the subjects/grades (3) certificate of proficiency in English for foreigners (unless the first degree was taught in English). For detailed information about the admission procedure please visit: www.iso.uni.lodz.pl
Contact	For questions about the studies please contact: dr Małgorzata Łapińska malgorzata.lapinska@biol.uni.lodz.pl Phone: +48 42 635 44 38 Fax: +48 42 665 58 19 In matters related to the admission procedure please contact: International Relations Office, University of Lodz

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