Environmental Engineering

spec. Modern Engineering in Water Management

Degree
Master's degree

Duration (semesters)
3

Number of ECTS required to complete the studies
90 ECTS

Environmental Engineering is a second-cycle Master's programme that develops advanced engineering competences for solving complex design and analytical problems related to technical infrastructure and the natural environment. The curriculum covers water supply and sewerage systems, environmental monitoring and air protection, environmental geotechnics and waste management, renewable energy, as well as water and river engineering, including river restoration, flood risk assessment, and retention reservoirs. Within the Modern Engineering in Water Management specialization, students deepen their expertise in integrated water resources management, with emphasis on hydrological and hydraulic modelling, urban and catchment hydrology, geoinformatic tools, groundwater and soil protection, and climate change adaptation.

Project-based, laboratory and field classes develop students' design, computational and analytical skills, supported by specialised digital tools for modelling, simulation and data analysis. Graduates are prepared to develop and assess alternative engineering solutions, evaluate their effectiveness, reliability and environmental impact, and make independent engineering decisions in environmental engineering and water management.

After completing the professional practice required by Polish law, our graduates may apply for state construction licences authorising them to design and supervise construction works — without limitations in hydraulic engineering and in sanitary networks and installations, and within a limited scope in structural and building engineering.

SYLLABUS

QUALIFICATION CRITERIA

Candidates eligible for the qualification process include those:

Holding a relevant diploma:

- a first-cycle diploma of an engineer in environmental engineering obtained in the Polish education system,

Holding a diploma requiring verification of alignment of learning outcomes:

· another field of study that resulted in the award of: a bachelor of engineering diploma or a long-cycle master's degree with a professional title master of engineering, or a foreign diploma entitling to apply for admission to second-cycle studies in Poland.

Method of verifying the alignment of learning outcomes: A scan of the diploma supplement or a certified transcript from the university listing subjects, hours, grades, and ECTS points completed in the study program based on which the candidate applies for admission is verified. The candidate uploads the specified documents to their profile in the IRK system. If any discrepancies in learning outcomes are identified through analysis, the student will be required to make up for the competency gaps during their second-cycle studies by completing and passing the subjects indicated by the committee, not exceeding 30 ECTS. Candidates who have had their expected learning outcomes positively verified are considered further in the qualification process.

Document confirming knowledge of English at level not lower than B2.

Candidates who meet the above requirements are qualified based on the arithmetic average of all final grades from the subjects included in the program of completed studies. If the number of candidates exceeds the admission limit, first-cycle environmental engineering graduates will be admitted first (based on the average grade from completed studies), followed by graduates of other fields of study (based on the average grade from completed studies). The result, based on which the ranking list is created, is the product of the aforementioned average and the alignment coefficient.