

PROGRAM FOR THE DEVELOPMENT OF FZO 2026-2030

This plan aims to **strengthen the faculty's interdisciplinary identity** by emphasizing the practical applications in the study of physical, chemical, and biological environments, and by integrating these domains with broader economic, social, and technological dimensions. Together with this, **FZO's internal organization** will be improved fostering a more direct student engagement in research and public outreach, and supporting career development for staff.

The plan is to **modernize the study programs to render them more attractive for students** by i) incorporating AI - either integrated it into existing courses or introduced as new AI-based subjects, ii) strengthening student fieldwork, and iii) promoting cross-border and ACROSS partnerships.

FACULTY ORGANIZATION

Clear interdisciplinary structure

I propose to organize FZO into three clear core interdisciplinary "Pan Areas", both in teaching and research and each of them represented by specific centres/departments:

- *Environmental management* covers topics like environmental governance and policy, risk assessment and communication, ecological design, nature-based solutions, sustainable resource use, environmental entrepreneurship, landscape architecture, AI-supported environmental decision-making, stakeholder engagement, and public communication.
- *Earth and climate* links land and water sciences with atmospheric systems, with emphasis on climate change, urbanization, overexploitation, and pollution across local to global scales.
- *Ecosystems and health* is devoted to the study of biodiversity and ecosystem adaptive responses through the integration of biochemistry, cellular biology, environmental epigenetics, computational genomics, and conservation biology.

Administrative improvements

Administrative processes, protocols, and documentation should be simplified to accelerate internal procedures (e.g., habilitations, curriculum implementation, and student services) while preserving academic quality. I propose investing in training for both staff and students on soft skills, communication, mentoring, teamwork. Information on projects, internships, and thesis opportunities should be made more accessible to allow students to better plan their academic development.

Cooperation and student engagement

FZO should strengthen ties with local companies in developing new measurement methods, environmental monitoring technologies, and measurement campaigns. Collaboration with Slovenian research institutes, public authorities, environmental agencies, and municipalities - engaging students through internships, training, workshops, and webinars - will connect students to real challenges and environmental questions even providing immediate participation in research. Problem-based learning should be explored as a complement or alternative to traditional seminar formats.

ACROSS can support joint MSc courses, guest lectures, blended intensive programmes, double degrees, Erasmus+ mobility, joint research projects, and shared teaching initiatives—intensifying cooperation with ACROSS universities.

Career development for staff

In addition to each Pan Area representative and FZO directors for Bsc and Msc, respectively, all members should participate in teaching, mentoring, FZO promotion, and curriculum development. I want to strengthen our internal teaching capacity and ensure that the majority of the FZO members will be involved with student's activities, while the relationship between internal and external course providers can be edited to enhance collaboration while avoiding disruptive changes.

STUDY PROGRAMMES

Upgrade of the BSc in Environment

The BSc should place greater emphasis on soil, air and water quality, environmental pollution, food safety, energy management, biotechnology, environmental governance, nature conservation, and entrepreneurship, for instance considering the implementation of topics such as satellite data, open databases, and AI-based digital environmental monitoring tools in the existing subjects.

Compulsory courses will be retained but reviewed and strengthened to ensure coherence and currency. Students should be trained on the use of publicly available environmental datasets, remote sensing, and modern analytical methods to understand and manage environmental processes. Advanced content in environmental management and nature conservation should include practical work on nature-based solutions, for instance river and wetland restoration, ecological design, and environmental governance and policy.

Development of MSc programmes

The central innovation is the expansion at the master's level of FZO's atmospheric and biological components by the design and promotion of two distinct MSc programmes that focus on climate change and environmental epigenetics, respectively.

The idea is to create a unique offer for students as double degrees with partner universities within ACROSS and including options for remote teaching, which should help the working-students in their university career and potentiate FZO's staff. Consideration should be given to awarding language credits for Erasmus+ experiences to formally recognise linguistic and intercultural competencies gained during mobility. We should emphasize laboratory work, fieldwork, applied research, and cooperation with external stakeholders.

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