REPORT

OF THE EXPERT PANEL

ON THE

RE-ACCREDITATION OF

UNIVERSITY OF ZAGREB

FACULTY OF GEOTECHNICAL ENGINEERING

Date of site visit:

27–29 October 2025

April, 2026

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INTRODUCTION

The Agency for Science and Higher Education (the Agency) is an independent legal entity with public authority, registered in the court register, and a full member of the European Quality Assurance Register for Higher Education (EQAR) and the European Association for Quality Assurance in Higher Education (ENQA).

All public and private higher education institutions are subject to re-accreditation, which is conducted in five-year cycles by the Agency, in accordance with the *Act on Quality Assurance in Science and Higher Education* (Official Gazette 151/2022) and subordinate regulations, and by following *Standards and Guidelines for Quality Assurance in the European Higher Education Area* (ESG) and good international practice in quality assurance in higher education and science.

The Agency's Accreditation Council appointed an Expert Panel to conduct an independent evaluation of University of Zagreb Faculty of Geotechnical Engineering.

Members of the Expert Panel:

- Assoc. Prof. Apostolos Giannis, PhD, Technical University of Crete, School of Chemical and Environmental Engineering, Hellenic Republic, Panel chair,
- Assoc. Prof. Sanja Dugonjić Jovančević, PhD, University of Rijeka, Faculty of Civil Engineering, Republic of Croatia,
- Assoc. Prof., Goran Vlastelica, PhD, University of Split, Faculty of Civil Engineering, Architecture and Geodesy, Republic of Croatia,
- Prof. Marco Barla, PhD, Politecnico di Torino, Italian Republic,
- Marta Bikić, student, Josip Juraj Strossmayer University of Osijek, Faculty of Civil Engineering and Architecture, Osijek, Republic of Croatia.

During the re-accreditation, the Expert Panel held meetings with the following stakeholders:

- Management,
- Representatives of the Committee for the preparation of the self-evaluation report,
- Students,
- Heads of study programmes,
- Full-time teaching staff,
- External associates,
- Assistants and junior researchers,

- Heads of doctoral programme and leaders of research projects,
- Representatives of the business sector, potential employers.

The Expert Panel members visited the work facilities, laboratories, the library, IT classrooms, student administration office and classrooms, and attended sample lectures, where they held a brief Q&A session with students.

In accordance with the site visit protocol, the Expert Panel examined the available additional documents and study programme descriptions (learning outcomes).

The Expert Panel drafted this Report on the re-accreditation of Faculty of Geotechnical Engineering on the basis of the Faculty of Geotechnical Engineering self-evaluation report, other relevant documents and the site visit.

The Report contains the following elements:

- Short description of the evaluated higher education institution,
- Brief analysis of the institutional advantages and disadvantages,
- List of institutional good practices,
- Analysis of each assessment area, recommendations for improvement and quality grade for each assessment area,
- Detailed analysis of each standard, recommendations for improvement and quality grade for each standard,
- Appendices (quality assessment summary by each assessment area and standard, and the site visit protocol),
- Summary.

In the analysis of the documents, site visit to the Faculty of Geotechnical Engineering and writing of the Report, the Expert Panel was supported by:

- Nika Hećej, coordinator, ASHE,
- Igor Opić, interpreter at the site visit,
- Dragan Koruga, translator of the Report.

The Agency shall make a decision to issue a licence.

On the basis of the reasoned proposal of the Accreditation Council, and the response of the Complaints Committee if a complaint has been filed, the Agency shall take a decision to issue a letter of expectation i.e. revoke the licence for the operation of a higher

education institution or to revoke the licence for delivering a study programme, within a maximum of 30 days upon receiving the reasoned proposal or the response of the Complaints Committee.

The decision to issue a letter of expectation shall define the measures that a higher education institution should take in order to meet the criteria for the operation of a higher education institution or a to meet the criteria for delivering a study programme, as well as the deadline for taking said measures.

There shall be no possibility of appeal against the decision of the Agency, but an administrative dispute may be initiated.

SHORT DESCRIPTION OF THE EVALUATED HIGHER EDUCATION INSTITUTION

NAME OF HIGHER EDUCATION INSTITUTION: UNIVERSITY OF ZAGREB FACULTY OF GEOTECHNICAL ENGINEERING

ADDRESS: Hallerova aleja 7, 42000 Varaždin, The Republic of Croatia

DEAN: Assoc. Prof. Ivana Grčić, PhD

ORGANISATIONAL STRUCTURE:

Teaching, scientific research, and professional activities at the Faculty of Geotechnical Engineering are carried out through its fundamental organizational units – the departments. The Faculty of Geotechnical Engineering consists of four departments, further information about which is available on their respective websites: the Department of General Sciences, the Department of Geotechnics, the Department of Water Management, and the Department of Environmental Engineering. Each department is headed by a Department Head. Within the Department of Geotechnics, the Geotechnical Laboratory and the Geotechnical Practicum have been established; within the Department of Water Management, the Environmental Geochemistry Laboratory and the Chemical Practicum have been established; and within the Department of Environmental Engineering, the Environmental Engineering Laboratory has been established. Additionally, an integrated virtual laboratory (VIRTULAB) has been set up. Each laboratory is managed by a Laboratory Head.

The Centre for Research and Student Support (CEPIS), in accordance with Article 33 of the Statute of the Faculty of Geotechnical Engineering (2023), is an organizational unit of the Faculty that provides support to students and researchers in conducting research and developing new technologies, fostering interdisciplinarity, multidisciplinary, creativity, and innovation, as well as supporting student career development. CEPIS consists of the following offices and units: the Office for International Cooperation and Projects, the Technology Transfer Office, the Career Development Centre, and the Professional Practice Workshop (Makerspace).

The Secretariat is an organizational unit of the Faculty responsible for organizing and performing professional, administrative, technical, and support tasks that ensure the regular operation of the Faculty. The Secretariat consists of the following offices: the Dean's Office, the General and Human Resources Office, the Student Administration Office, the IT Support Office, and the Facilities and Property Maintenance Office. The Secretariat is managed by the Faculty Secretary, who supports the Dean and vice-deans in their work.

The Accounting Office is an organizational unit of the Faculty that organizes and performs bookkeeping financial operations, and material management. The Head of Accounting is responsible for the work of the Office to the Vice-Dean for Management and to the Dean.

Library is an organizational unit of the Faculty and forms part of the University's library system. The organization and scope of the Library's activities, the work of library staff, and library management are regulated by a general act of the Faculty. The Head of the Library is accountable to the Vice-Dean for Education and to the Dean. Oversight of the development and functioning of the library system is exercised by the Library Committee, appointed by the Faculty Council upon the Dean's proposal. The work of the Library is regulated by the Library Rules of the Faculty of Geotechnical Engineering (2019).

STUDY PROGRAMMES:

The Faculty of Geotechnical Engineering (GFV) organizes and delivers university and professional study programmes (undergraduate, graduate, and postgraduate) in the scientific field of technical sciences, within the area of interdisciplinary technical sciences, civil engineering, and other related fields. It also conducts scientific and highly professional work in the fields of technical, natural, and interdisciplinary sciences. At the Faculty of Geotechnical Engineering, university study programmes in Environmental Engineering are conducted at three levels of higher education:

- Undergraduate university study programme in Environmental Engineering (register code 1952),
- Graduate university study programme in Environmental Engineering (register code 2277),

• Postgraduate doctoral study programme in Environmental Engineering (register code2461).

NUMBER OF STUDENTS: 111 full-time and 24 part-time

NUMBER OF TEACHERS: 31 teachers, 1 senior assistant, 2 assistants, 4 nominal teachers

SHORT DESCRIPTION OF THE EVALUATED HIGHER EDUCATION INSTITUTION:
The Faculty of Geotechnical Engineering (GFV) is a public higher education institution within the University of Zagreb (UNIZG). For over 50 years, the Faculty of Geotechnical Engineering has represented the core of higher education in the field of engineering in the northwestern part of the Republic of Croatia. It is one of three constituent units of the University of Zagreb located outside of Zagreb, and the only faculty within the University's technical field authorized to deliver university-level programmes in Varaždin. Throughout its history, the present-day Faculty of Geotechnical Engineering has undergone changes in orientation, name, and location. Higher education in this field began with the establishment of the Higher Technical School of Mining and Geophysical Exploration in Varaždin, founded by a decision of the Council for the Education of Oil, Geophysical Exploration, Mining, and Metallurgical Personnel in Varaždin on September 20, 1969. By a ruling of the District Commercial Court in Zagreb on December 11, 1970, and upon the proposal of the School's Working Community, the name was changed to the Higher Geotechnical School Varaždin. The establishment of this School was supported by several industrial organizations at the time, most notably: "Geotehnika" Zagreb, "Geofizika" Zagreb, "Geosonda" Belgrade, "Geoistraga" Sarajevo, and the Geological Institute in Ljubljana. Teaching at the Higher Geotechnical School was organized in three courses—Geotechnics, Hydrotechnics, and Surface Mining & Quarries—and lasted five semesters. At that time, there was strong demand throughout the former state for this professional profile. In the early years, more than fifty students graduated annually. In 1974, in response to requests from construction companies, a new course in Civil Engineering was introduced. As of September 4, 1972, the Higher Geotechnical School Varaždin operated within the Faculty of Mining, Geology and Petroleum Engineering at the University of Zagreb. Classes were conducted by 7 full-time staff based in Varaždin, together with lecturers from the Faculty of Mining, Geology and Petroleum Engineering and the Faculty of Civil Engineering in Zagreb. During its existence, the Higher Geotechnical School Varaždin established strong collaboration with companies across Croatia through professional projects in geotechnical and hydrotechnical works. This

cooperation enabled the expansion of school facilities, the equipping of laboratories, the acquisition of fieldwork equipment, and the professional development of its staff.
The rapid development of the construction industry in Varaždin County in the early 1970s created a demand for civil engineering professionals. Therefore, in 1974, the Higher Geotechnical School started a civil engineering programme at level VI (higher professional qualification), lasting five semesters, with a specialization in Building Construction. In 1977/1978, this programme was upgraded to align fully with the level VI programme at the University of Zagreb's Faculty of Civil Engineering Sciences. For two cohorts, a level VII/1 programme was also offered, leading to the title of Master of Civil Engineering with a specialization in Construction Organization and Economics. Teaching for both full-time and part-time students was held in Varaždin, while final examinations were conducted in Zagreb before a joint committee of the Faculty of Civil Engineering Sciences and the Higher Geotechnical School. Lecturers included faculty from the Faculty of Civil Engineering Sciences, the Higher Geotechnical School, the Faculty of Organization and Informatics, and practicing experts from Varaždin and Čakovec. This joint civil engineering programme operated successfully from 1977/1978 until 1991/1992. The Higher Geotechnical School operated until 1991, when it was upgraded into the Faculty of Geotechnical Engineering, becoming an independent constituent unit of the University of Zagreb. In May 1990, approval was requested from the Ministry of Education and Culture to launch a level VII/1 university programme in Geotechnical Engineering, and to change the institution's name to the Faculty of Geotechnical Engineering in Varaždin. In 1993/1994, the Faculty also established a study programme in „Technical Environmental Protection". In 2005, the Faculty introduced a Bologna-aligned university programme in Geoengineering, designed both to preserve its tradition in Geotechnics and Hydrotechnics and to shift toward Environmental Engineering. For the first time, Environmental Engineering was introduced as a study course. The Faculty played a proactive role in promoting Environmental Engineering within Croatian legislation, seeking its recognition as a discipline already widely established internationally. The undergraduate university programme in Environmental Engineering was introduced in 2012, replacing the undergraduate programme in Geoengineering, while the graduate university programme in Environmental Engineering was launched in 2015, replacing the graduate Geoengineering programme. In 2018, the Faculty initiated a postgraduate doctoral programme in Environmental Engineering, thus completing the transition of all study levels toward Environmental Engineering. In 2021/2022, part-time (professional)

studies in Environmental Engineering were introduced at both undergraduate and graduate levels, enabling study opportunities for working students.

A BRIEF ANALYSIS OF THE INSTITUTIONAL ADVANTAGES AND DISADVANTAGES

ADVANTAGES OF THE INSTITUTION

1. The vision and enthusiasm of the Faculty administration and defined short-term and long-term development plans;
2. Attractiveness of the study at a time of great challenges in environmental engineering and multidisciplinary nature of study programmes that allow working in different positions;
3. Teachers' ability to dedicate themselves to students due to a favourable student/teacher ratio.
4. Recognition of certain teams of experts/scientists in solving challenges in the real sector;
5. Positive atmosphere at the Faculty;
6. Contribution to local workforce and economy;
7. Accredited laboratory for geotechnical analyses;
8. The Faculty is highly supported by external stakeholders and community.

DISADVANTAGES OF THE INSTITUTION

1. Small number of students and low interest in enrolling in the current study programmes;
2. It is not clear how well-founded the directions for developing study programmes are;
3. The Faculty lacks clear recognition because its name does not align with the qualification it awards;
4. The procedures for ensuring and improving quality are insufficiently defined, and the role of the Quality Assurance Committee is not clearly established;
5. Undefined procedures for dealing with student evaluations, providing feedback to students, and involving heads of organizational units in evaluation procedures of teaching processes;
6. The library and study spaces/resources available to students are of very low quality.
7. Weak or no support for students from vulnerable groups and low awareness of this issue.

8. Poor publication record of quality papers in prestigious journals and low activity of scientists in recognized journal committees and editorial boards.
9. Insufficient development of lifelong learning programmes.
10. Weak international reputation of the Faculty.

LIST OF INSTITUTIONAL GOOD PRACTICES

EXAMPLES OF GOOD PRACTICE

1. Creating study programme in line with the current national and regional needs (environmental engineering).
2. Student mobility. Several realised outgoing and incoming mobility via CEEPUS and Erasmus+ Programme. The Faculty organises promoting events, provides information on the website, availability of Erasmus coordinator, etc.
3. Procurement of research equipment by EU project funds.
4. Integration of practical work in teaching programmes (internships, course laboratory work, living laboratory).
5. Organization of events to popularize the profession and promote visibility of the HEI (Water Day, Popular Wednesday, Environment Day).
6. Cooperation between departments in solving professional matters.
7. A well-established culture of applying for competitive project funding calls.
8. Strong connection with the real sector through projects and professional work, student internships, work in committees and other HEI bodies.

ANALYSIS OF EACH ASSESSMENT AREA, RECOMMENDATIONS FOR IMPROVEMENT AND QUALITY GRADE FOR EACH ASSESSMENT AREA

I. Higher education institution management and quality assurance

Analysis

The HEI has a defined mission and operates according to the set strategic goals (Development Strategy and Scientific Research Strategy). In accordance with the intention of internal and external evaluations, the Faculty has made significant improvements since the last procedures that were carried out. According to the recommendation from the last external evaluation, the Faculty has organized an internal audit. The recommendation is to continue this practice as a mandatory procedure. The Faculty has been reorganized and has defined acts and working groups that deal with certain areas of the Faculty's activities, ensuring not only implementation, but also quality improvement.

However, it was noted that the role of the Quality Assurance Committee in implementing measures after the overall analyses of the Faculty's activities, is unclear or non-existent, and that decisions on some issues are made at the level of the Faculty management or the Dean. No major problems were observed in the Quality Assurance System, however, the clear inclusion of all stakeholders in all processes (not as an option but prescribed by regulations) is necessary. It is also necessary to provide feedback to students on implemented changes based on their evaluations. The education of all stakeholders about vulnerable groups in the system is mandatory.

Recommendations for improvement

- Include all stakeholders in defining the mission of the HEI and in all decision-making processes;
- Define obligatory periodic internal quality assurance procedures;
- Include the Quality Assurance Committee in all important quality aspects and procedures;
- Process student surveys systematically, ensuring anonymity, the involvement of the Quality Assurance Committee and feedback about changes being implemented;
- Define and implement the evaluation procedure for poorly graded teachers (collaborative assessment);
- Educate all teachers and students about underrepresented and vulnerable groups.

Quality grade

Satisfactory fulfilment of the standard

II. Study programmes and lifelong learning programmes

Analysis

The HEI has clearly defined learning outcomes for all three levels of Environmental Engineering studies, aligned with CroQF and EQF descriptors, with detailed matrices linking courses to programme-level outcomes. The outcomes emphasize problem-solving, modern engineering tools, and interdisciplinary approaches, supported by documented teaching and assessment methods. The revision in 2023 ensured compliance with national standards and scientific developments.

Programme learning outcomes are defined and available in Croatian within the Faculty but still not available in English. The institution has formalized procedures for the planning and revision of study programmes, based on data and stakeholder feedback, with final approval by academic bodies. Recent curriculum updates reflect labour market needs and advances in green technologies, however the number of students is small and plans to revise the undergraduate study programme appear not to be sustainable. Professional practice is an integral part of the programmes, coordinated by the Career Development Centre through partnerships with public and private organizations. Finally, the Faculty has established a framework for lifelong learning through short courses and outreach activities, though accredited programmes and systematic evaluation procedures are still under development and remain a priority for future enhancement.

Recommendations for improvement

- Ensure that programme-level and course-level learning outcomes as well as description of the study programme for each course are published in both Croatian and English language on the Faculty's website, making them easily accessible to students, employers, and international partners to strengthen transparency and mobility.
- Perform benchmark analysis of international courses on environmental engineering and evaluate that minimum number of students are available before planning to launch new paths at the undergraduate level.
- Strengthen cooperation with employers, alumni, and professional associations through structured consultations and tracer studies, ensuring that programme updates continuously reflect emerging trends in environmental engineering and green technologies.
- Expand and formalize the network of professional partners for student practice.
- Develop systematic evaluation framework for student internships that includes learning outcome mapping, supervisor feedback, and student self-assessment.

- Develop and accredit lifelong learning programmes in environmental engineering to increase its national and international visibility.
- Integrate lifelong learning into the regular quality assurance cycle.

Quality grade

Minimal fulfilment of the standard

III. Student-centred learning and teaching – teaching process and student support

Analysis

The HEI provides a supportive academic environment, with clear strengths as well as areas that require further development. Teaching is largely student-centred through project work, laboratories, field activities, and the use of digital tools. Preparatory courses help students with diverse prior knowledge, yet the motivation of teaching staff to improve pedagogical approaches is limited, and systematic mechanisms for monitoring teaching quality are still underdeveloped. Assessment procedures are transparent, well-regulated, and aligned with learning outcomes. Students express satisfaction with fairness and objectivity, and appropriate adjustments exist for students with disabilities and part-time students. However, staff require more training in inclusive assessment, and students would benefit from stronger psychological support. Enrolment, progression, and recognition procedures are publicly available and consistently applied, with recognition of prior learning aligned with international principles. Although mobility opportunities exist, student participation remains low, indicating a need for stronger encouragement and clearer communication. The Faculty offers academic, administrative, career, and disability-related support, but students report limited access to psychological services, insufficient staff preparedness for working with vulnerable groups, and inadequate awareness of existing support mechanisms. In terms of international mobility, information is provided through various channels, ECTS recognition is ensured, and some courses are available in English. Still, mobility levels remain modest, the number of English-taught courses is limited, and the website in English can be difficult to navigate.

Recommendations for improvement

- Improve communication and visibility of existing support services;
- Strengthen staff training in pedagogy and inclusion;
- Ensure more accessible psychological support;
- Enhance the promotion and facilitation of international mobility.

Quality grade

Satisfactory fulfilment of the standard

IV. Teaching capacities and infrastructure of the higher education institution

Analysis

The HEI employs over 30 full-time academic staff across four departments, with 8 from the programme's scientific field, meeting regulatory requirements. Additional support is provided by postdocs, assistants, and external collaborators. More than 50% of teaching hours are delivered by permanent staff, and the student-teacher ratio is approximately 2.4–3.5:1 when considering part-time PhD students. Facilities include lecture halls, seminar rooms, laboratories, as well as offices, IT resources, and a library.

Teacher recruitment, advancement, and reappointment follow national standards, University regulations, and internal criteria emphasizing scientific research, teaching quality, professional activities, international collaboration, mentoring, and securing external funding. Transparent procedures include public job competitions, expert committee evaluations, and multi-level approvals. However, internal competitive elements such as international collaboration, excellence in digital pedagogy, and participation in externally funded projects could further highlight excellence in recruitment and promotion.

Professional development and mentoring exist but are not fully codified. Mentoring of junior staff occurs through research projects, doctoral supervision, and teaching involvement. International mobility is recent, and workshops are offered irregularly without systematic monitoring of participation or impact. Sabbatical leave is allowed in practice but lacks a formal ordinance detailing eligibility, obligations, outputs, and application procedures.

Library services meet basic functional requirements, with adequate space and improved ICT access. However, collections are outdated, especially in English, strategic development plans are lacking, and the reading room requires modernization. Overall, the Faculty has sufficient financial resources, including state-funded positions, tuition fees, research projects, and professional services, supporting teaching, research, and professional activities.

Recommendations for improvement

- Re-evaluate PhD student status and adjust the student-teacher ratio accordingly.

- Assess and monitor teaching workload over a 5-year period; adjust for small class sizes.
- Introduce structured mentoring programmes and a yearly plan for workshops and professional development.
- Adopt a formal Sabbatical Leave Ordinance, specifying eligibility, obligations, expected outputs, and timelines.
- Enhance recruitment by including internal competitive criteria and structured scoring for evaluations.
- Modernize library facilities, expand collections, particularly in English, and improve digital access and infrastructure.
- Promote laboratories at national and regional levels and ensure sustainable funding for teaching, research, and professional activities.

Quality grade

Satisfactory fulfilment of the standard

V. Research/ artistic and professional activity

Analysis

Based on the Self-Evaluation Report, its accompanying documents, and the findings of the site visit, the Faculty of Geotechnical Engineering has made significant efforts to advance research activities and to strengthen the environmental engineering discipline. The scientific productivity is encouraged through national and international research projects, collaborations with industry and professional activities. The faculty operates an accredited laboratory for geotechnical analyses which offers a unique opportunity country-wide for related professional services. The Faculty of Geotechnical Engineering strongly promotes collaboration with external stakeholders to resolve issues related to environmental protection.

The Faculty teachers publish scientific and professional papers, while main research outputs are presented at national and international conferences. However, research productivity and excellence should be strengthened. Greater efforts are needed to enhance professional engagement, particularly those having professional programmes.

The Doctoral programme is managed responsibly, while efforts are made to attract international students through Erasmus Mundus and other programmes. However, a clearer direction to environmental engineering discipline is required with the involvement of stakeholders and local community.

Recommendations for improvement

- Strengthen scientific activities, particularly by promoting professional achievements. Encourage faculty teachers to publish scientific and professional books, university handbooks, and textbooks within the faculty's publishing activity.
- Motivate faculty teachers to publish high-quality scientific and professional papers in Q1 international journals. Linking publication in Q1 journals with career advancement and promotion.
- Increase faculty participation in committees and international bodies related to higher education, science, and professional development.

Quality grade

Satisfactory fulfilment of the standard

DETAILED ANALYSIS OF EACH STANDARD, RECOMMENDATIONS FOR IMPROVEMENT AND QUALITY GRADE FOR EACH STANDARD

I. Higher education institution management and quality assurance

1.1. The mission of a higher education institution guides the process of operational planning and the development of quality assurance processes.

Analysis

The HEI operates in line with its mission and vision. The current mission and vision of the Faculty are defined in the Development Strategy of the Faculty of Geotechnical Engineering of the University of Zagreb for the period 2023–2027 and the Scientific Research Strategy of the Faculty of Geotechnical Engineering for the period 2023–2027. The HEI has also defined the scientific mission of the Faculty and has developed the research profile of the Faculty accordingly. The mission statement is the starting point for the process of strategic planning and setting the strategic goals. The Panel didn't find a defined process of development and definition of the mission of the higher education institution or evidence of involvement of different groups of (internal and external) stakeholders in the development of the mission. But it has found the connection of the mission with the processes of strategic and operational planning. In their Self-Evaluation Report they state that the mission and vision, along with the Development Strategy set out the general strategic development objectives. They state that the Development Strategy draft was prepared by a Working Group comprising: the Dean (responsible for general strategic goals and alignment of specific objectives), the Vice-Dean for Education (teaching related goals), the Vice-Dean for Science and International Cooperation (research-related goals), the Vice-Dean for Management (professional development goals), and the Faculty's Quality Management Committee (quality assurance goals and ESG alignment). Department heads were responsible for aligning their departments' long-term plans with the final draft strategy. Heads of administrative units ensured the alignment of their respective areas (Faculty Secretary for legal matters and governance, Head of Accounting for professional/business operations, and Head of the Library for library services). Students and external stakeholders were involved through the Faculty Council where they have representatives who had the opportunity to contribute to drafting, and adoption of the mission. It cannot be said that the mission directs the development of the quality system because the HEI lacks clear quality assurance procedures. The Dean and the Faculty Council are responsible for the quality assurance system at the Faculty of Geotechnical Engineering, while at the operational level this

responsibility lies with the Quality Assurance Committee (in planning, implementing the planned activities and their verification as well as proposing changes). On the other hand, the Quality Assurance Committee is not systematically involved in some important aspects of quality assurance (e.g., changes to study programmes or preparation of new ones, acting on collected student surveys, ensuring the quality of teachers' work). Quality Assurance at the Faculty is not structured and is seen as important part of the sporadic processes such as rare audits and external evaluation (reaccreditation).

Recommendations

- Include all stakeholders in defining the mission of the Faculty.
- Define obligatory periodic internal quality assurance procedures.
- Ensure inclusion of the Quality Assurance Committee in all important quality aspects and activities.

Quality grade

Satisfactory fulfilment of the standard

1.2. The higher education institution defined the internal organizational structure and processes that are managed responsibly, efficiently and effectively, and the higher education institution's stakeholders are included in the decision-making processes.

Analysis

The management of the HEI is based on the academic self-governance of higher education institutions. University autonomy and self-governance are fundamental values of the University of Zagreb, as defined in the Statute of the University of Zagreb and the Statute of the Faculty of Geotechnical Engineering. The HEI has regulated and improved the internal organisation. The structure and organization of the Faculty are defined by the Statute of the Faculty of Geotechnical Engineering (2023), and in alignment with the Statute of the University of Zagreb (2023). It is good to mention that they have established the Centre for Research and Student Support (CEPIS), the Office for International Cooperation and Projects, the Technology Transfer Office (TTO), the Career Development Centre of the Faculty of Geotechnical Engineering (CDC) and the STEM Centre for Children and Youth (STEM Centre).

In accordance with their Statute, the Faculty is managed by the Dean, who is its head and chief executive. The Dean's Board includes the Dean, vice-deans, and the Faculty Secretary in narrow composition. The extended composition includes also the

department heads, the Faculty Secretary, and the Chair of the Quality Assurance Committee. The Faculty Council consists of: all employees in scientific-teaching positions, one representative from teaching positions, one representative from associate positions, student representatives who make up 10% of the total number of Faculty Council members (of which no more than 20% may be doctoral students), and one representative of other employees. The permanent working bodies of the Faculty Council are: the Teaching Committee, the Science Committee, the Postgraduate Studies Committee, the Library Committee, the Quality Management Committee, the Gender Equality Committee, the Ethics Committee, and the Disciplinary Committee.

The HEI is identifying educational, scientific and professional programmes of their interest, and makes decisions based on their development. The HEI has financial autonomy under a programme agreement, and it seems responsible towards the social community, demonstrating a fairly strong but informal connection and dialogue with external stakeholders. The publicity of the Faculty's work is ensured particularly through public accessibility of data on their website and social networks. Financial reports and plans, as well as the current and past development strategies and the Scientific and Research Strategy are publicly available. The HEI regularly and transparently informs stakeholders on strategy implementation through publication of the reports on their website (i.e., Dean's annual reports on the implementation of the development strategy are available to the interested stakeholders).

HEI organises the events open to the public such as conferences, round tables, and other events (i.e., Water Day, Popular Wednesday, Environment Day, Career Days) and follows all events through posts on social networks and their website. The HEI has published publications by its teachers, such as books and teaching literature, as well as their periodical publication (Environmental Engineering journal). The HEI has a good relationship with external stakeholders, holds roundtables, informal dialogue and regularly includes them in its projects and development plans, however, the Panel has found few defined (formal) procedures for their inclusion in decision-making, and finds that there can be improvements.

The HEI collects and processes the data and generates reports (for example reports prepared for the University of Zagreb and annual reports according to the development strategy), but as mentioned, they lack the procedures of including all the stakeholders in the process. Based on the results of the analyses, management makes informed decisions. It is not clear if the students and other stakeholders are involved in these processes in the way and as much they should be. Feedback from students has been systematically collected since 2012 through the Teacher Evaluation Survey and the Overall Study Evaluation Survey. The results of these surveys should be processed systematically, ensuring anonymity, the involvement of the quality committee and feedback to students,

informing them what has been improved according to the surveys. Systems for monitoring teachers who have received poorer ratings should also be ensured.

The higher education institution manages its financial resources transparently, efficiently, purposefully, and sustainably.

Recommendations

- Define the formal procedures for clear inclusion of HEI's stakeholders in all decision-making processes;
- Report on the implementation of programme agreement and make it visible for all the interested stakeholders;
- Define clear and regular ways of communication between the student representative in the council and other students;
- Processed student surveys systematically, ensuring anonymity, the involvement of the quality committee and feedback to students;
- Define and implement the evaluation procedure for poorly graded teachers (collaborative assessment).

Quality grade

Minimal fulfilment of the standard

1.3. The higher education institution collects, analyses and uses data relevant for the effective management of all activities, and publishes the information about its work.

Analysis

The Panel members have found that the HEI collects data (on students, programmes, etc.), analyses them and uses relevant information to monitor trends, and make certain informed decisions on the management level and Faculty Council levels. In some processes, the HEI uses information systems and keeps electronic records and ensures access to and exchange of data in accordance with the national legislative framework. An administrative and technical IT Support Service has been established as part of the Secretariat organizational unit (Vice-Dean for Management coordinates the work of this Service). The Vice-Dean for Education regularly collects and updates data and submits reports on the work of the Faculty Council working bodies dealing with undergraduate and graduate studies. Reports include analyses of student pass rates at examinations, analyses of reasons for early student withdrawal from studies, analyses of the level of implementation of measures to improve teaching quality, and similar. Based on the

reports and analyses, discussions are held on the reasons for identified nonconformities, and proposals for improvements are provided.

The higher education institution has prescribed and consistent measures to use the information systems and ensure information security. The Authentication and Authorization Infrastructure of the science and higher education system (AAI@EduHr) enables all users of the HEI to use online services simply, securely, and reliably through a unique electronic identity. The HEI uses ISVU, a web-oriented modular information system that supports processes related to teaching and to monitoring students' progress, as prescribed by legal acts. Doctoral study programme is not implemented in the ISVU system. For communication with students (posting of announcements, teaching materials, and instructions, as well as sharing information about study programmes, approval procedures, and updates to curricula), the HEI is using the SRCE e-learning system Merlin. Access to Merlin is enabled for students and teachers through their AAI@EduHr electronic identity. They use DABAR as institutional repository, for ensuring the preservation and dissemination of scientific, educational, and other outputs in digital form (over 60% available in open access). The HEI uses Information System of Records in Higher Education (ISeVO) and CroRIS for gathering information on research activities. One of the specific CARNET services implemented at the Faculty was introduced to provide a qualified electronic signature and seal. To ensure timely information on planned meetings, sessions, and other events throughout the academic year, the HEI annually prepares GFV iCalendar using MS Planner. All adopted documents are available to all employees through the Faculty's Intranet system (with AAI@EduHr identity and appropriate levels of authorization). GOSSIP has been implemented as main Organizational System for Students and Employer to meet the needs and requirements of professional practice implementation at the Faculty.

The HEI informs the public on admission criteria, enrolment quotas, study and educational programmes, learning outcomes and qualifications, forms of support available to students, procedures applied in teaching, learning, and assessment, pass rates, learning opportunities available to students, as well as information on the employment of students who have recently graduated. The Faculty is systematically monitoring graduate employability from the 2020/2021 academic year. In addition to the website, students and stakeholders are also informed through social networks (Linkedin, Instagram, Facebook, Tik Tok, YouTube).

The Faculty processes personal data in accordance with the General Data Protection Regulation (GDPR) and in accordance with the Ordinance on the Processing and Protection of Personal Data, with the application of appropriate technical and organizational measures to prevent unauthorized access, misuse, loss or destruction of personal data.

Partial information on study programmes and on the work of a higher education institution is publicly available on their web site but not in one unique document. What is available is the presentation of the study and the learning outcomes of the study. The information is available in Croatian and should be available in English language too.

Recommendations

- Involve students and other stakeholders in data analysis and decision-making processes;
- Implement the strategy for the digital transformation to enhance the institutional development, quality assurance, efficiency, transparency, and all service accessibility for students and staff;
- Implement administration of the doctoral study in the ISVU system.

Quality grade

Satisfactory fulfilment of the standard

1.4. The higher education institution supports ethics and transparency, academic integrity and freedom, and prevents all types of unethical behaviour, intolerance, and discrimination.

Analysis

The HEI promotes, supports and ensures ethical and transparent work, academic integrity and freedom. The work of employees of the higher education institution, its students and external stakeholders, is based on ethical standards in higher education. The Code of Ethics is the fundamental act that regulates the principles of academic ethics, which regulates the basic ethical principles, ethical principles in science and higher education, the organization and work of the Ethics Committee and the procedure before the Ethics Committee of the Faculty. The Ethics Council of the University of Zagreb coordinates the activities of ethics committees at individual constituents. In order to effectively implement academic ethics, the Faculty does not have its own separate code but acts according to the Code of Ethics of the University of Zagreb. The employees of the Faculty are also subject to the provisions of the Rules of Procedure of the Faculty of Geotechnical Engineering, which, among other things, very precisely determine: the protection of the dignity of employees from harassment and sexual harassment and their right to respect for the person and protection of dignity, prohibition of harassment and sexual harassment, the manner of receiving, acting and resolving complaints.

The Faculty is also subject to the application of the Act on the Right of Access to Information, which grants all domestic and foreign natural and legal persons, equally and under the same conditions, the right to access information. Annual reports on the implementation of this act at the Faculty are published regularly, at least once a year on their website.

The higher education institution effectively takes measures to prevent unethical behaviour, intolerance and discrimination. The Ethics Committee of the Faculty monitors the application of principles in the field of ethical conduct, conducts the procedure of examining the merits of complaints about unethical behaviour and gives opinions on complaints from employees and students. They have defined procedures, however there are no recorded cases that needed to be resolved, or to sanction unethical behaviour, intolerance and discrimination. An anonymous physical suggestion box is used as a channel for collecting anonymous student feedback (positive and negative experiences in the teaching process).

In order to achieve the goals defined by the Code of Ethics, the Ordinance on Disciplinary Responsibility of Students and was adopted at the level of the Faculty. The Ordinance regulates the procedure for determining violations of obligations of students. For any breach of obligation, students are subject to disciplinary action. In the period of academic year 2020/2021 to the academic year 2023/2024, no disciplinary measures were imposed on students. The HEI applies new technologies to addresses issues of plagiarism (using the PlagScan until 2023/24 and Turnitin software since 2023/24). All members of the academic community who participate in scientific research work must guarantee the originality of published scientific papers and the authorship attributed to them, as well as accuracy and honesty in presenting and stating information about the origin of the ideas and citations used in the paper. Students enclose a Statement of Academic Integrity addressing the originality and consent for public publication.

From the conversations during the visit to the faculty, the committee nevertheless got the impression that there is a lack of awareness about certain vulnerable groups of students and that all teachers and students need to be educated about the possible difficulties that some students face and thus present underrepresented and vulnerable groups.

Recommendations

- Adopt your own (institutional) code of ethics;
- Consider the involvement of at least one student in ethical procedures concerning students;
- Educate all teachers and students about the possible difficulties that some students are facing and thus present underrepresented and vulnerable groups.

Quality grade

Satisfactory fulfilment of the standard

1.5. The quality assurance system is periodically improved and revised on the basis of the results of implementation of regular internal and external quality assurance procedures.

Analysis

An integral part of the Development Strategy of the Faculty of Geotechnical Engineering is the planning of the quality assurance system. The Faculty, with the help of the Quality Management Committee (as written in the Self-Evaluation Report, as if the Committee is not part of the "Faculty"), uses the quality assurance system and available information systems to collect available data using various methods, process and analyse them. Based on the results of the analyses, the Quality Management Committee plans further activities and improvements, and conducts strategic planning, proposes guidelines and procedures for ensuring and improving quality in all areas of the Faculty's activities. However, it seems that the "Faculty" and the Quality Management Committee are somewhat separated, meaning that the "Faculty" (management, and perhaps even the Dean himself) make some decisions based on analyses, in which the committee does not have a clear role. In order to further strengthen the quality assurance system and harmonize its activities, a new organizational unit has been established at the Faculty - the Quality Office, which implements a system of internal assurance and improvement of the quality. The decision on the appointment of this Office is made by the Faculty Council on the proposal of the Dean.

The HEI fosters the development of a quality culture through active participation in external quality assurance processes with the purpose of adopting useful changes and new perspectives to the HEI. The quality assurance system is periodically improved and revised on the basis of results of implementation of the regular internal and external quality assurance procedures in line with the ESG. The HEI has used the recommendations from the last external evaluation to introduce significant improvements. An internal evaluation has also been organized, which the Panel recognises and recommends that it be continued. Based on internal audit, the quality assurance system of the Faculty has been evaluated as effective.

The HEI provides reports to all interested stakeholders to inform them about their plans to improve and progress towards those plans. The higher education institution publishes

clear, accurate, objective, valid and easily accessible information on the internal and external evaluation procedures on their website.

The HEI conducted an internal evaluation of the quality assurance system in a cycle that is shorter than the external evaluation cycle, but since this is not a defined procedure but the recommendation from the last external re-accreditation, the Panel members agree to define and implement periodic internal quality assurance procedures regularly. The HEI ensures that the preparation for internal and external quality assurance processes considers the progress made since the last quality assurance processes, which form a continuous improvement cycle.

Recommendations

- Define and implement periodic internal quality assurance procedures;
- Strengthen the role of the Quality Management Committee in external and internal evaluation procedures and adopt clear regulations on their roles and procedures.

Quality grade

Satisfactory fulfilment of the standard

II. Study programmes and lifelong learning programmes

2.1. The intended learning outcomes at the level of a study programme are aligned with the competences a student should gain by completing the study programme, as well as with the CroQF level (ESG 1.2.).

Analysis

The HEI has defined and structured learning outcomes for all three levels of Environmental Engineering studies: undergraduate, graduate, and doctoral, aligned with the Croatian Qualifications Framework (CroQF) and European Qualifications Framework (EQF) descriptors. Detailed outcome matrices in Annex II link each course to specific programme-level outcomes, ensuring vertical alignment of knowledge, skills, and competences. Learning outcomes emphasize problem-solving, application of modern engineering tools, environmental assessment, and interdisciplinary integration, reflecting the professional profile of an environmental engineer. Each outcome is measurable and supported by corresponding teaching and assessment methods recorded in ISVU. The revision process in 2023 ensured compliance with national

standards and contemporary scientific and professional developments. Programme learning outcomes are defined and available in Croatian within the Faculty and in English only in accreditation documentation. Overall, outcome-based curriculum design now provides coherence across study levels and ensures graduates achieve the expected competences defined for CroQF levels 6, 7, and 8. Moreover, the learning outcomes are aligned with comparable programmes in other national and international institutions.

The study programme document does not exist as a unique document on the web site. According to the Higher Education Act the HEI must ensure all the following information (which is not the case for HEI): 1. Professional or academic title or academic degree acquired upon completion of the study; 2. Compliance of the study programme with the corresponding qualification in the Register of the Croatian Qualifications Framework, 3. Conditions for enrolment in the study, conditions for enrolment in the next semester, trimester or study year, and conditions for enrolment in other study obligations; 4. List of mandatory and elective courses with an indication of the ECTS load, form of teaching, course content, planned learning outcomes and course holder; 5. Planned learning outcomes acquired upon completion of the study; 6. Number of enrolment places in the study; 7. Organization and form of teaching; 8. Method of verification of acquired learning outcomes for each course or other study obligation and; 9. Method of completion of the study.

Recommendations

- The HEI should ensure that programme-level and course-level learning outcomes are published in both Croatian and English on the Faculty website, making them easily accessible to students, employers, and international partners. This will strengthen transparency and international mobility.
- The HEI should assure that the description of the study programme for each course is available and accessible to students, including all information (according to the Higher Education Act) about the study programmes.
- The HEI should translate and publish the study programmes in the English language.

Quality grade

Satisfactory fulfilment of the standard

2.2. The higher education institution determined the processes for planning and developing new study programmes, and for monitoring and periodically revising the existing ones. This ensures that the study programme is up-to-

date, and that the content of study programmes is aligned with the latest scientific / artistic / professional knowledge (ESG 1.2. and ESG 1.9.).

Analysis

The HEI has established formalized processes for the planning, development, monitoring, and periodic revision of study programmes, aligned with the University of Zagreb Ordinance on the Evaluation of Study Programmes (2024) and ESG 1.2 and 1.9. The process is coordinated by the Vice-Dean for Education and the Quality Assurance Committee, with the active involvement of department heads, students, and external stakeholders. Proposals for changes are supported by data from the ISVU system, student surveys, alumni feedback, and recommendations from the International Scientific Advisory Board. Programme revisions are approved by the Faculty Council and the University Senate, ensuring consistency with the Croatian Qualifications Framework and contemporary scientific and professional developments.

The study programmes content ensures horizontal and vertical student mobility in the national and European education area. The 2023–2027 Development Strategy emphasizes some modernization of curricula to reflect advances in environmental protection, green technologies, and decarbonization. Recent updates to Environmental Engineering programmes demonstrate responsiveness to stakeholder input and evolving labour-market needs, ensuring the ongoing relevance and quality of all study programmes.

The HEI has plans to change the current study programme increasing the number of paths at the undergraduate level despite the overall number of students is very small. Furthermore, this action would be contrary to the actions taken by leading international universities.

Recommendations

- The HEI should perform benchmark analysis of international courses on environmental engineering to support their updating processes.
- The HEI should ponder carefully the opportunity to increase the study paths for undergraduates to avoid the risk of creating classes with a very limited number of students.
- The HEI should publish up-to-date versions of study programmes, also in English.
- The HEI should enhance stakeholder and labour-market feedback mechanisms. Strengthen cooperation with employers, alumni, and professional associations through structured consultations and tracer studies, ensuring that programme

updates continuously reflect emerging trends in environmental engineering and green technologies.

- The HEI should enhance collaboration with national and foreign institutions to enrich the possibility for horizontal and vertical mobility.

Quality grade

Minimal fulfilment of the standard

2.3. Student practice is an integral part of study programmes, where applicable.

Analysis

Student professional practice has become a structured and integral component of both undergraduate and graduate Environmental Engineering programmes. Since 2020, the Faculty has institutionalized the Career Development Centre (CDC) within the Centre for Research and Student Support (CEPIS) to coordinate internships, fieldwork, and cooperation with industry partners. Practical training is implemented through courses such as Geotechnical Lab 1, Hydrogeology, and Environmental Chemistry, and is further supported by the Professional Practice Workshop. Agreements with local authorities, public utilities, and private companies ensure that students gain relevant field and professional experience. Feedback from employers and students is collected and analysed annually by the Vice-Dean for Teaching and the Quality Assurance Committee. These measures directly address the 2018 recommendation to expand practice-based learning. Ongoing objectives include broadening the network of partners and introducing formal recognition of external internships within ECTS structures to further strengthen employability and professional competence.

Recommendations

- The HEI should expand and formalize the network of professional partners for student practice. Broaden cooperation with public institutions, private companies, and NGOs at the national and regional levels through new agreements and joint projects.
- The HEI should establish a central database of partner organizations coordinated by the Career Development Centre (CDC) to ensure consistent quality, supervision, and relevance of placements across all study levels.
- The HEI should strengthen monitoring and recognition of learning outcomes achieved through practice. Develop a systematic evaluation framework for student internships that includes learning outcome mapping, supervisor feedback, and student self-assessment.

- The HEI should clarify the role and the number of supervisors for external internships.

Quality grade

Satisfactory fulfilment of the standard

2.4. Quality assurance of lifelong learning programs is part of the internal quality assurance system of the higher education institution. This ensures that study programmes are relevant and up to date and that they meet the current social needs.

Analysis

The Faculty has established a regulatory and organizational framework for lifelong learning through its Statute (2023) and the University Ordinance on Lifelong Learning (2024), integrating these activities into its internal quality assurance system. General oversight is provided by the Quality Assurance Committee, which monitors planning, delivery, and participant feedback within the same PDCA cycle applied to study programmes. Although the Faculty currently implements lifelong learning mainly through short courses, seminars, the STEM Centre for Children and Youth, and professional workshops within CEPIS, the procedures for their evaluation, reporting, and improvement are defined. Stakeholders and alumni contribute to needs assessments, ensuring thematic relevance to regional environmental challenges, but their involvement is rather informal and does not follow standardised procedures. Moreover, formally accredited lifelong learning programmes are still in a development stage, and systematic data on impact and learner satisfaction are limited. The Faculty recognizes this as a development priority in its Five-Year Action Plan (2023–2027), aiming to launch structured, accredited programmes that directly respond to societal and labour-market needs in environmental engineering.

Recommendations

- The HEI should continue to develop and accredit lifelong learning programmes in environmental engineering, to improve competence of teaching and academic staff, to secure additional income, and to increase its national and international visibility.
- The HEI should ensure the Quality Assurance Committee is involved in the development process and in the evaluation of the outcomes integrating lifelong learning into the regular quality assurance cycle.

- The HEI should define clear procedures for the involvement of stakeholders, moving from informal discussions to planned and structured interaction, feedback evaluation and reporting.

Quality grade

Minimal fulfilment of the standard

III. Student-centred learning and teaching – the teaching process and student support

3.1. Learning and teaching are student-centred and ensure that all the intended learning outcomes are achieved.

Analysis

The Faculty of Geotechnical Engineering of the University of Zagreb designs its study programmes and teaching methods to promote student motivation, self-reflection, and active engagement in the learning process. From the first year, students participate in project-based learning, laboratory and field work, and teamwork, which enhances motivation and connects theoretical knowledge with practical application.

Recognizing the diversity of students' prior educational backgrounds, the Faculty introduced preparatory courses in Mathematics, Physics, and Chemistry to ensure smooth study progression. Teaching formats (lectures, laboratories, seminars, and field exercises) are continuously adapted based on student feedback and achieved learning outcomes, supporting inclusivity and engagement.

Digital learning tools, primarily through the Merlin e-learning platform, facilitate interactive and accessible education. The system supports online consultations, quizzes, communication, and learning materials, while tools like MS Teams and Zoom are used for remote activities. Integration with the DABAR repository further enhances students' academic literacy and encourages independent research.

However, the Faculty acknowledges several areas for improvement. The committee found that many teachers show limited motivation to improve or innovate their teaching methods. Although workshops for pedagogical development have been planned in collaboration with other faculties, they have not generated significant participation, particularly among older professors. Furthermore, systematic mechanisms for

monitoring and assuring teaching quality and the consistent use of diverse pedagogical methods are not yet fully developed.

Recommendations

- Introduce regular teacher development workshops on active learning and student-centred teaching methods;
- Encourage peer observation of teaching among teaching staff;
- Integrate interdisciplinary project work across different study years for students and teaching staff;
- Develop clear mechanisms for quality assurance of pedagogical methods.

Quality grade

Satisfactory fulfilment of the standard

3.2. The assessment and evaluation are objective and consistent, and they ensure that all the intended learning outcomes are achieved.

Analysis

Assessment methods and criteria are clearly defined in each course syllabus before the start of the semester and aligned with the Ordinance on Studying at Undergraduate and Graduate Studies and national regulations. Students are informed about evaluation methods during introductory lectures and via the Merlin e-learning system. Assessment is conducted in written and/or oral form, and continuous assessment provides students with multiple opportunities to demonstrate their progress and competencies.

During the Expert Panel visit, students expressed satisfaction with the transparency and fairness of the grading system and the opportunities to demonstrate their knowledge. Objectivity is ensured through structured procedures, including the right to appeal and re-evaluation by an independent committee. Students may review their written exams, and oral exams are conducted to ensure transparency.

The Faculty provides reasonable adjustments for students with disabilities and other vulnerable groups, such as extended exam time, digital materials, or assistant support. Timetables are adapted for part-time students who are often employed. However, students emphasized the need for greater awareness and training for both staff and associates regarding support for students with difficulties, as well as the presence of a professional counsellor or psychologist to address mental health and academic stress.

While there are individual initiatives to improve assessment and teaching skills, systematic pedagogical training and quality assurance of teaching practices are not yet institutionalized. Interest in such initiatives remains limited, particularly among senior academic staff.

Recommendations

- Conduct annual reviews of exam formats to ensure alignment with learning outcomes;
- Provide training for staff on inclusive assessment for students with disabilities;
- Strengthen communication about appeal and re-evaluation procedures to ensure transparency;
- Develop a repository of good practice examples in assessment and feedback.

Quality grade

Satisfactory fulfilment of the standard

3.3. The requirements for student enrolment and progress, recognition and certification are clear, publicly available, and consistently applied.

Analysis

The Faculty's enrolment policy and strategy are aligned with national legislation and the University of Zagreb's strategy. The enrolment policy is sensitive to the needs and difficulties of students from vulnerable and underrepresented groups, and the Faculty provides accessible information and individual consultations with the Student Office to ensure equal opportunities for all applicants.

Admission criteria and procedures are publicly available on the Faculty's website and consistently applied. Selection is based on transparent indicators such as high school performance, State Matura exam results in Mathematics, and additional achievements (e.g., national STEM competition awards). Special quotas exist for Croats outside Croatia and foreign students, with Croatian language proficiency requirements ensuring fairness and academic readiness.

The Faculty applies formal procedures for the recognition of prior learning in accordance with the Lisbon Recognition Convention. Recognition decisions involve the ECTS coordinator, relevant course teachers, and approval by the Vice-Dean for Education and the Dean. The Faculty cooperates with the ENIC/NARIC Office and the University of Zagreb's Office for Academic Recognition.

Student mobility is encouraged through Erasmus+, CEEPUS, and other exchange programmes. However, the Expert Panel noted that although the institution provides favourable conditions for student mobility, participation rates remain low, and students should be more strongly encouraged to take advantage of opportunities, particularly in Western Europe.

Upon graduation students receive a diploma and diploma supplement free of charge, in both Croatian and English.

Recommendations

- Establish regular external benchmarking of admission and recognition procedures;
- Introduce info sessions for applicants from vulnerable groups or foreign backgrounds.

Quality grade

Satisfactory fulfilment of the standard

3.4. The higher education institution provides sufficient and easily accessible resources to support students.

Analysis

The HEI systematically provides academic and personal support to students, emphasizing an individualized approach due to its smaller size.

Several institutional bodies (Student Office, Career Development Centre, Centre for Research and Student Support, etc.) ensure that students have access to tutoring, career counselling, academic advising, psychological support, and legal and mobility guidance.

Since 2016/2017, the HEI has operated a “class management system” for undergraduate students (year leaders, teachers were appointed to monitor student progress). In 2024, this system was updated to a single head responsible for all undergraduate years. The Faculty has a demonstrator system where senior or high-achieving students assist peers in core courses.

Students are introduced to all support mechanisms from the start of their studies through introductory lectures, the Freshmen’s Guide, and orientation week activities. Students are also introduced to the University of Zagreb Counselling Centre, which

provides psychological and academic support. However, students reported a serious lack of psychological support services in Varaždin and insufficient awareness among both students and staff on how to interact with individuals with disabilities or other vulnerabilities. The infrastructure is also not adapted to people with disabilities.

While the Faculty provides computer access and digital resources in the library, students expressed concerns about outdated equipment, limited accessibility, and the lack of modern, comfortable (e.g. temperature in the room) spaces.

There is a designated coordinator for students with disabilities, ensuring individual support and guidance. As can be seen on the Faculty's website, the Faculty offers the elective course "Peer Support for Students with Disabilities".

Recommendations

- Organize on-site visits or monthly sessions with a psychologist from the University Counselling Centre;
- Upgrade library computers and ensure that library is a comfortable, spacious and welcoming space;
- Improve communication and visibility of support services (updated website, visual posters, etc.);
- Train teaching and administrative staff on working with students with disabilities and vulnerable groups;
- Improve the visibility and communication of existing initiatives aimed at promoting inclusion among students;
- Implement periodic evaluation of support satisfaction (biannual surveys, focus groups);
- Create a buddy system pairing first-year and senior students;
- Introduce inclusive design principles in all infrastructure projects.

Quality grade

Minimal fulfilment of the standard

3.5. The higher education institution provides favourable conditions and support for students entering international outgoing and incoming mobility programmes.

Analysis

The HEI regularly informs students about mobility opportunities, participation conditions, application procedures, and ECTS recognition. Information is available through the Faculty's website, bulletin boards, the Merlin system, and Career Days, via the Office for International Cooperation and Projects and ECTS coordinator, and through individual consultations and workshops. The Office for International Cooperation and Projects coordinates all activities related to student mobility.

The HEI guarantees recognition of ECTS credits from other higher education institutions through its ECTS coordinator and established procedures that align with Erasmus+ and University of Zagreb regulations.

Information on enrolment and study opportunities is available in English on the Faculty's website (built-in automatic translation tool) and in the promotional materials prepared for incoming students. However, it can be challenging for international students to navigate the website, and reliance on automatic translation may limit accuracy and clarity.

Some classes and materials are offered in English, especially for students participating in exchange programmes. Foreign students can learn Croatian through the Croaticum Centre at the University of Zagreb, as promoted on the Faculty's website. Some Croatian courses are delivered in English.

The HEI systematically gathers feedback from students after mobility. Under the Decision on Encouraging Student Mobility (in force since 2012), returning students must hold a 30-minute presentation about their experience to inform and motivate others.

The Faculty recognizes that while many students express interest in mobility, few ultimately apply or complete exchanges. Contributing factors include indecision, fear of adaptation, financial uncertainty, and linguistic barriers.

Recommendations

- Enhance the visibility and clarity of mobility information on the website in a form of dedicated English page;
- Strengthen promotion of mobility opportunities through social media;
- Encourage staff mobility to model international engagement for students;
- Improve English language support materials for incoming students;
- Expand the number of English-taught courses to attract more incoming students.

Quality grade

Satisfactory fulfilment of the standard

IV. Teaching capacities and infrastructure of the higher education institution

4.1. The higher education institution ensures adequate teaching capacities.

Analysis

The Faculty of Geotechnical Engineering (GFV) explicitly states that it is an independent constituent unit of the University of Zagreb offering university undergraduate, graduate, and doctoral programmes in Environmental Engineering, a subfield within Interdisciplinary Technical Sciences (2.16).

The higher education institution has an adequate number of teachers employed full time at the scientific-teaching positions. According to the report, the Faculty employs more than 30 full-time teachers in scientific-teaching positions, distributed across four departments: Department of General Sciences, Department of Geotechnics, Department of Water Management and Department of Environmental Engineering.

Within these, eight teachers are from the relevant scientific field (Environmental Engineering within Interdisciplinary Technical Sciences), satisfying the minimum of three field-specific teachers. Additionally, the Faculty employs assistants, postdocs, and researchers who support teaching and research; external collaborators from other University of Zagreb faculties (when required for specific interdisciplinary or elective courses).

Therefore, the staffing structure meets the regulatory standard (≥ 21 teachers for a university constituent, ≥ 3 from the programme's scientific field).

More than 50% of total teaching hours in university study programmes are delivered by permanently employed academic staff (scientific-teaching and postdoctoral positions). All teachers, including external associates, are qualified for the courses they deliver, have relevant work experience and integrate the latest trends and knowledge from the labour market into the teaching process.

The ratio between the total number of enrolled students and the total number of full-time teachers and those with nominal teaching titles is satisfactory. Present ratio of ~3.5:1 is well below the regulatory ceiling of 30:1 required by the quality standard. However, in the total number of students (111), all postgraduate students are started in table 1 as full-time students. Considering their number is relatively high (33), and most of them work during their study and as stated consider themselves part-time students, this number should be revised. Also, in teacher workload it is stated that additional work at

PhD studies is paid additionally and considered as overtime. Therefore, student/teacher ratio should be considered to be ~2.4:1.

Total annual teaching load of all teachers does not exceed 20% of the total annual teaching load. There are some teachers that exceed the limit. However, it is stated that teachers are awarded full workload for courses even if they have one student enrolled, which is not clear with KUZVO. Workload should be reduced proportionally in those occasions at least for ex ante and ex post activities, in accordance with a specific institutional decision.

Recommendations:

- Re-evaluate the status of PhD students, most are obviously part-time students;
- Evaluate the teaching workload on a 5-year basis, in order to ensure that none of the teachers exceeds the standard workload during 5-year period;
- Re-evaluate workload for a very low number of students and make a decision on the standardization of courses with a very small number of students.

Quality grade:

The standard is completely fulfilled.

4.2. Teacher recruitment, advancement and re-appointment is based on objective and transparent procedures, which include evaluation of excellence.

Analysis

In the past period the HEI has developed and regularly updated the staff recruitment policy and plan in order to ensure adequate teaching capacities. However, promotion criteria at the HEI nowadays are based on nationally prescribed standards, University of Zagreb criteria, and clearly defined internal requirements that emphasize excellence in scientific research, teaching quality, professional activities, international contribution, mentoring, and securing external funds. The procedures of teacher recruitment are aligned with the higher education institution's development goals, relevant legislation and internal regulations.

A transparent promotion plan is ensured through publicly announced job competitions, Expert Committee written evaluations, and multi-level approval procedures. These processes guarantee objective, competitive, transparent, and excellence-focused recruitment, advancement, and re-appointment of teachers.

The recruitment process fully meets national requirements; however, additional internal competitive criteria could make excellence more visible. Including internal competitive elements in vacancy notices, such as a strong track record of international collaboration; excellence in modern teaching methods/digital pedagogy or contribution to externally funded projects.

Recommendations:

- Include internal competitive elements in vacancy notices;
- Add a structured scoring system used by the Expert Committee to evaluate candidates and ensure the selection of the best candidates for each position.

Quality grade:

The standard is completely fulfilled.

4.3. The higher education institution ensures support to teachers in their professional development.

Analysis

The criteria for rewarding of excellence are clear, transparent and consistently applied. It is also visible that the HEI encourages the transfer of knowledge within the organisation. The HEI is nominally supporting the teachers in their professional and career development, but there are few cases of the completed training. The HEI is not using data from teacher self-assessment, peer observation, student surveys to refer them to training courses. Professional development exists but is not systematically monitored (no formal annual development plans per teacher). Joint work is mentioned but lacks concrete systematic tracking (e.g., no KPI for joint publication rates or cross-department collaboration). Some workshops were provided, but not frequently and evaluation of their long-term impact is not fully evidenced. More effort should be provided to ensure more workshops for teacher professional development, and it should be additionally evaluated in yearly teacher plan and as additional internal conditions for promotion or awarding.

The HEI encourages and supports the participation of teachers in international and national competitive projects. They also encourage the participation of teachers in international mobility programmes and collaborative networks, however there is space for possible improvements in the area of teachers' mobility. International mobility has been detected; however, it is only recent.

Mentoring of younger colleagues is done through research projects, doctoral supervision, and structured teaching involvement. Culture of collaboration exists, evidenced by joint projects, teaching activities, and events. There are areas requiring stronger evidence or improvement, such as no formal written mentoring policy. Mentoring is practiced in some way but it is not fully codified as a structured mentorship programme.

There is no Ordinance on Sabbatical Leave and the Faculty allows sabbaticals but lacks a formal ordinance overseeing the process.

Recommendations:

- Introduce a yearly plan of workshops and professional development for teachers in all areas of their work;
- Send teachers to training courses based on the data form student surveys, teacher self-assessment and peer observation (mandatory for low graded teachers);
- Yearly tracking of teacher participation in programmes, and interviews with teachers which are not active in programmes;
- Finalize and adopt the Sabbatical Leave Ordinance;
- Investigate the possibility of introducing pedagogical requirements for newly hired staff (as pre or post condition i.e., introduce a 5-year contract for assistant prof. with this condition);
- Encourage the participation of teachers in international mobility programmes.

Quality grade:

Minimal fulfilment of the standard.

4.4. The premises, equipment and the complete infrastructure is suitable for teaching, scientific/artistic and professional activities.

Analysis

The Faculty of Geotechnical Engineering provides ample, well-maintained, and functionally organised infrastructure, supporting all core teaching, scientific, and professional activities. The Self-Evaluation Report and institutional description indicate that the Faculty operates within a dedicated building offering significantly more than the required minimum of 1 m^2 of space per enrolled student, ensuring comfortable conditions for learning, laboratory work, consultation hours, project work, and independent study. The available teaching premises include lecture halls, seminar rooms, computer rooms, and specialized laboratories that reflect the Faculty's environmental and geotechnical profile, such as geotechnics, hydrology, geochemistry, geophysics, GIS,

and environmental monitoring laboratories. These facilities are equipped with the tools and instrumentation necessary to support both scientific research and practical classes, ensuring alignment with programme learning outcomes. This was confirmed during the site visit.

The Faculty also maintains a library and reading room with computer access, complemented by an institutional intranet and digital platforms providing online teaching materials and bibliographic resources. IT infrastructure is adequate for current student numbers and teaching needs, and classrooms are equipped with the standard technological teaching equipment. Importantly, the Faculty is actively modernising and upgrading its facilities: one room is currently undergoing reconstruction to become a dedicated podcast/video recording room, which will enhance digital teaching capabilities, support the creation of multimedia learning materials, and strengthen innovative pedagogical practices.

Classrooms are equipped with seats for students, a lectern and the equipment necessary to present instructional content. Laboratories are equipped with adequate laboratory equipment necessary for research to be conducted for universities and for teaching practical classes. Offices of teaching staff and offices of employees in professional services are equipped with office equipment necessary for the work of teaching staff and professional services.

Recommendations:

- No additional recommendations.

Quality grade:

The standard is completely fulfilled.

4.5. The library and library equipment, including access to additional resources, ensure the availability of literature and other resources necessary for a high-quality of study and scientific-teaching/artistic-teaching activities.

Analysis

The site visit confirmed that the Faculty has addressed several deficiencies noted in the 2018 evaluation. The library space is adequate size for the present student population (only because of current low number of students), and improvements in ICT infrastructure have increased the accessibility of digital materials. Students reported that online access to articles and scientific literature is satisfactory and that computers in the

reading room mostly support study needs. Staff states that electronic resources and interlibrary cooperation provide access to scientific databases in the field.

However, some limitations remain and can be noticed. The physical library space remains modest in size, and opening hours may not fully align with students' needs. The Faculty has improved digital access but lacks a strategic development plan for expanding collections, especially in English and other foreign languages. Evidence of systematic updating of library materials was not seen during the visit. Additionally, actions taken specifically in response to the 2018 negative assessment were only partially demonstrated.

Overall, the library functions in daily practice and meets some of the basic requirements for supporting the study programmes, but a lot of opportunities remain for strengthening collections, user services, and transparency regarding library development.

In the Library of the Faculty of Geotechnical Engineering (reading room) there is a permanent exhibition "Surveying", donated to the Library of the Faculty of Geotechnical Engineering. Although it is nice to see, consider moving the exhibition to a better location. The library reading room urgently requires thorough reconstruction to become a modern and pleasant environment for 21st-century readers.

Recommendations:

- Increase number of up-to-date textbooks (library fond is mostly obsolete);
- Increase the number of textbooks, monographs, and journals available in English, and ensure that electronic interfaces and user guides are available in English for foreign students and staff;
- Develop a structured Library Development Plan covering acquisitions, digital resources, equipment renewal, and service enhancement;
- Improve visibility of services by clearly publishing opening hours, available resources, and instructions for accessing e-resources;
- Improve the availability of the library for students (longer working hours, personnel availability, if understaffed consider student librarian help);
- Strengthen ICT and digital infrastructure, including regular renewal of computers and ensuring strong Wi-Fi throughout the library.

Quality grade:

Minimal fulfilment of the standard

4.6. The higher education institution provides the necessary financial resources to conduct teaching, scientific and professional activities.

Analysis

The Faculty provided evidence that it has sufficient financial resources to run its accredited study programmes. This is supported by:

- Inclusion in the Programme Agreement signed between the University of Zagreb and the Ministry of Science and Education;
- Stable state-funded positions for academic staff;
- Predictable income from tuition fees of part-time and postgraduate students;
- Additional income from projects, professional services, and research contracts.

Overall, the institution demonstrates financial stability and adequate funding to support teaching, research, and professional activities.

Recommendations:

- Further promotion of laboratories at regional and national level.

Quality grade:
The standard is completely fulfilled.

V. Research/ artistic and professional activity

5.1. The higher education institution is recognisable by scientific research and/or artistic achievements in all the scientific fields in which it conducts studies.

Analysis

The Faculty of Geotechnical Engineering demonstrates its commitment to scientific excellence through internal policies encouraging teachers to publish high-quality research. The scientific work is grounded in original research concepts, geotechnical methodologies, and interdisciplinary scientific approaches. The Faculty members actively pursue research in areas of geotechnical mechanics, geodesy, mining and geological engineering, environmental and chemical engineering and interdisciplinary technical sciences ensuring that research outputs reflect both originality and scientific rigor. Emphasis is given in scientific writing and publication principles (training session). However, the Faculty has a limited number of scientific papers published in Q1 journals (less than eight in the past 5 years), and its research outputs do not fully meet expected

standards, although it does publish a considerable number of papers in various open-access journals. The Faculty teachers and associates actively participate in domestic and international scientific conferences, and contribute to the publication of numerous conference proceedings.

Project activities in geotechnical and environmental engineering are clearly recognized as the Faculty's priorities, with efforts directed toward applied research, environmental monitoring, and technology-focused development initiatives. However, competitive projects remain limited, reducing opportunities for broader international collaborations, and participating in global engineering networks.

Given the Faculty's staff capacity and interdisciplinary potential, greater emphasis should be placed on encouraging the organization of international conferences and motivating teachers to publish research articles, textbooks, and handbooks. The Faculty publishes the journal 'Environmental Engineering', which demonstrates publishing outreach activities. This initiative helps to increase the visibility, credibility, and academic impact of the Faculty research output. Furthermore, the Faculty promotes student involvement in laboratory and field-based investigations, provides supervision and methodological guidance, and supports participation in academic seminars, conferences, and workshops.

Recommendations

- Strengthen institutional support for increasing research publications in Q1 journals;
- Foster a high standard of scientific excellence to strengthen the Faculty’s global competitiveness:
- Enhance institutional support for Faculty pursuing roles on the editorial boards of peer-reviewed scientific journals;
- Increase the organization of international scientific and professional conferences, especially those aimed at international collaboration;
- Design workshops provided by more successful researchers at the University for all University teachers regarding improving research activities.

Quality grade

Satisfactory fulfilment of the standard

5.2. The higher education institution is distinguished by its professional achievements in all fields in which the professional study programme is delivered.

Analysis

The Faculty of Geotechnical Engineering strives to strengthen the recognition of its professional achievements at both the national and international levels. According to the Self-Evaluation Report, the Faculty is actively working to enhance collaboration with the economic sector, particularly in areas related to environmental protection. These efforts include partnerships with government, industry and local stakeholders, engaging in research projects that address real-world environmental challenges, and promoting the transfer of knowledge and innovative technologies. By aligning its professional activities more closely with the needs of the environmental sector, the Faculty aims to increase its societal impact, improve the practical expertise of its staff, and further solidify its standing within the broader professional and industrial community.

The accredited Geotechnical Laboratory provides a wide range of professional services related to geotechnical analyses and the assessment of hazardous environmental pollution. Its activities include soil characterization and testing, as well as analytical procedures for detecting contaminants in soil, groundwater, and other materials. The Geotechnical Laboratory operates in accordance with recognized professional standards, ensuring the reliability and scientific validity of its results.

The Faculty of Geotechnical Engineering organizes discussion addressing professional studies with economic sector and local community. In addition, the Faculty provides advisory and consultancy services to stakeholders with specific societal and industrial needs and expectations. However, the professional activities are less intensive compared to research works. Nonetheless, the Faculty has the potential to achieve greater professional recognition nationally and internationally, given its capacities and the scientific disciplines it covers.

Recommendations

- Enhance the Faculty's competitiveness, particularly focusing on professional publications that contribute to the development of specific sectors;
- Encourage the active role of technology transfer office;
- Continue to reward and recognize scientific work and exceptional achievements related to project applications and funding received.

Quality grade

Satisfactory fulfilment of the standard

5.3. The higher education institution influences the economy and society in general through the scientific and/or artistic work of its teachers.

Analysis

The Self-Evaluation Report highlights the Faculty's proactive approach to fostering collaboration with the economic sector and a broad range of external stakeholders. These partnerships are cultivated through various mechanisms, including participation in joint research and development projects, the organization of professional internships that provide students with practical experience, and long-standing cooperation with institutions in the public sector. Such collaborations support the transfer of knowledge and expertise, enhance the relevance of academic programmes, and contribute to addressing real-world challenges in geotechnical and environmental engineering.

The Faculty also actively promotes undergraduate and graduate theses that emerge from these collaborative initiatives. By encouraging students to undertake research topics developed in partnership with industry and public-sector stakeholders, the Faculty ensures that student work is grounded in practical challenges and reflects current professional needs. Finally, the Faculty frequent organizes and promotes dissemination activities and local outreach events (STEM activities, World Environment Day, etc.).

The Faculty demonstrates strong ties with external stakeholders to disseminate the Faculty's activities to society and economy needs. The STEM centre for Children and Youth is a key hub for student and local society engagement for formal and informal academic activities. Through activities of teachers, alumni and graduates, the Faculty cooperates closely with many professional associations related to geotechnical and environmental activities. Finally, the Faculty of Geotechnical Engineering is establishing a new field of environmental engineering to meet the national need for addressing issues about environmental protection and restoration. This initiative can create specialized personnel and programmes focused on applying scientific and engineering principles to solve environmental issues such as pollution control, waste management, and water and air quality improvement.

Recommendations

- Use internal policies to increase faculty participation in governing bodies at national and international levels;
- Encourage teachers to evaluate international programmes and projects;
- Leverage alumni and external stakeholders to strengthen project applications and establish new forms of cooperation connecting the Faculty with the economy and society.

Quality grade

Satisfactory fulfilment of the standard

5.4. Doctoral studies of the higher education institutions are aligned with the higher education institution's strategic programme, state-of-the-art scientific/artistic achievements, or professional standards and internationally accepted standards of high-quality doctoral education, where applicable.

Analysis

The Faculty offers a doctoral study programme in Environmental Engineering, which is designed to deliver high-level interdisciplinary research and support the transfer of scientific knowledge to society and the economic sector. Through its emphasis on rigorous scientific inquiry, international cooperation, and collaboration with industry, the programme plays a significant role in strengthening overall scientific excellence within the Faculty. According to the Self-Evaluation Report, the Faculty implements systematic measures to monitor, evaluate, and continuously improve the quality of the doctoral programme.

The Faculty considers that the doctoral study programme in Environmental Engineering has strong potential to attract international students (mobility schemes like Erasmus Mundus). Additionally, the Faculty's existing research collaborations, participation in international projects, and connections with foreign universities provide a solid foundation for increasing the programme's international visibility. The doctoral programme tries to connect international mobility and entrepreneurship, as international movement can lead to entrepreneurial opportunities through exposure to new markets, networks, and ideas, and entrepreneurs often seek international mobility to develop their career.

Recommendations

- Assess the potential added value of implementing a joint doctoral study programme;
- Encourage stronger alignment between doctoral research topics and societal and economic needs;
- Define the research topic earlier during the study;
- Strengthen the internationalization of PhD students;
- Consider requesting student mobility and/or cooperation with international institutions in the fulfilment of part of the obligations on PhD studies.

Quality grade

Satisfactory fulfilment of the standard

5.5. The higher education institution applies the principles of open science in its activities, processes and acts.

Analysis

According to the Self-Evaluation Report, the Faculty does not adopt an open science policy. However, the Faculty encourages faculty members, staff, researchers, and students to publish their scientific work in open-access repository platforms and share research data and methodologies with the scientific community and society.

The Faculty uses the institutional repository (DABAR) that serves as a digital platform for archiving final, graduate, and doctoral theses. This repository ensures long-term preservation, accessibility, and visibility of outputs, enabling students, researchers, and external stakeholders to access relevant academic work in an open and transparent manner. By depositing theses in DABAR, the Faculty supports the principles of open science and enhances the dissemination of knowledge in relation to geotechnical and environmental engineering. However, despite the availability of the DABAR repository, the percentage of openly accessible theses remains relatively low, limiting the broader visibility and impact of the Faculty's academic output. Increasing the proportion of open access materials and establishing procedures for depositing research data will significantly enhance scientific engagement.

The Faculty has limited access to scientific articles and conference proceedings, which constrains the availability of up-to-date scientific literature to teachers, staff and students. The accessible materials are obtained informally through the personal contacts and professional networks of Faculty members, rather than through institutional subscriptions or structured access to academic databases. Strengthening institutional mechanisms for accessing scientific publications would significantly enhance the research environment and support research quality and productivity.

Finally, the Faculty publishes the open access journal 'Environmental Engineering', thereby strengthening its commitment to openly disseminating scientific knowledge. By providing unrestricted access to peer-reviewed research, the journal supports the Faculty's open science policy and enhances the visibility of its academic outputs.

Recommendations

- Adopt the open science policy;

- Increase the number of scientific and professional works available through open data;
- Conduct systematic assessments to evaluate the extent to which open science principles and policies are being implemented.

Quality grade

Satisfactory fulfilment of the standard

FINAL RECOMMENDATION OF THE EXPERT PANEL MEMBERS ON THE OUTCOME OF THE CONDUCTED PROCEDURE:

a. ☑ **ISSUE A LICENCE**

b. ☐ **ISSUE A LETTER OF EXPECTATION**

c. ☐ **DENY A LICENCE**

ANNEXES

1. Quality grade summary – tables

2. Site-visit Protocol

Quality grade by assessment area				
Assessment area	The standard is not fulfilled	Minimal fulfilment of the standard	Satisfactory fulfilment of the standard	The standard is completely fulfilled
I. Higher education institution management and quality assurance			×	
II. Study programmes and lifelong learning programmes		×		
III. Student-centred learning and teaching – the teaching process and support			×	
IV. Teaching capacities and infrastructure of the higher education institution			×	
V. Research/ artistic and professional activity			×	

Quality grade by standard				
I. Higher education institution management and quality assurance	*The standard is not fulfilled*	*Minimal fulfilment of the standard*	*Satisfactory fulfilment of the standard*	*The standard is completely fulfilled*
1.1. The mission of a higher education institution guides the process of operational planning and the development of quality assurance processes.			×	
1.2. The higher education institution defined the internal organizational structure and processes that are managed responsibly, efficiently and effectively, and the higher education institution's stakeholders are included in the decision-making processes.		×		
1.3. The higher education institution collects, analyses and uses data relevant for the effective management of all activities, and publishes the information about its work.			×	
1.4. The higher education institution supports ethics and transparency, academic integrity and freedom, and prevents all types of unethical behaviour, intolerance, and discrimination.			×	
1.5. The quality assurance system is periodically improved and revised on the basis of the results of implementation of regular internal and external quality assurance procedures.			×	

Quality grade by standard				
II. Study programmes and lifelong learning programmes	*The standard is not fulfilled*	*Minimal fulfilment of the standard*	*Satisfactory fulfilment of the standard*	*The standard is completely fulfilled*
2.1. The intended learning outcomes at the level of a study programme are aligned with the competences a student should gain by completing the study programme, as well as with the CroQF level (ESG 1.2.).			×	
2.2. The higher education institution determined the processes for planning and developing new study programmes, and for monitoring and periodically revising the existing ones. This ensures that the study programme is up-to-date, and that the content of study programmes is aligned with the latest scientific / artistic / professional knowledge (ESG 1.2. and ESG 1.9.).		×		
2.3. Student practice is an integral part of study programmes, where applicable.			×	
2.4. Quality assurance of lifelong learning programs is part of the internal quality assurance system of the higher education institution. This ensures that study programmes are relevant and up to date and that they meet the current social needs.		×		

Quality grade by standard				
III. Student-centred learning and teaching – the teaching process and student support	*The standard is not fulfilled*	*Minimal fulfilment of the standard*	*Satisfactory fulfilment of the standard*	*The standard is completely fulfilled*
3.1. Learning and teaching are student-centred and ensure that all the intended learning outcomes are achieved.			×	
3.2. The assessment and evaluation are objective and consistent, and they ensure that all the intended learning outcomes are achieved.			×	
3.3. The requirements for student enrolment and progress, recognition and certification are clear, publicly available, and consistently applied.			×	
3.4. The higher education institution provides sufficient and easily accessible resources to support students.		×		
3.5. The higher education institution provides favourable conditions and support for students entering international outgoing and incoming mobility programmes.			×	

Quality grade by standard				
IV. Teaching capacities and infrastructure of the higher education institution	*The standard is not fulfilled*	*Minimal fulfilment of the standard*	*Satisfactory fulfilment of the standard*	*The standard is completely fulfilled*
4.1. The higher education institution ensures adequate teaching capacities.				×
4.2. Teacher recruitment, advancement and re-appointment is based on objective and transparent procedures, which include the evaluation of excellence.				×
4.3. The higher education institution ensures support to teachers in their professional development.		×		
4.4. The premises, equipment and the complete infrastructure is suitable for teaching, scientific/artistic and professional activities.				×
4.5. The library and library equipment, including access to additional resources, ensure the availability of literature and other resources necessary for a high-quality of study and scientific-teaching/artistic-teaching activities.		×		
4.6. The higher education institution provides the necessary financial resources to conduct teaching, scientific and professional activities.				×

Quality grade by standard				
V. Research/ artistic and professional activity	*The standard is not fulfilled*	*Minimal fulfilment of the standard*	*Satisfactory fulfilment of the standard*	*The standard is completely fulfilled*
5.1. The higher education institution is recognisable by scientific research and/or artistic achievements in all the scientific fields in which it conducts studies.			×	
5.2. The higher education institution is distinguished by its professional achievements in all fields in which the professional study programme is delivered.			×	
5.3. The higher education institution influences the economy and society in general through the scientific and/or artistic work of its teachers.			×	
5.4. Doctoral studies of the higher education institutions are aligned with the higher education institution's strategic programme, state-of-the-art scientific/artistic achievements, or professional standards and internationally accepted standards of high-quality doctoral education, where applicable.			×	
5.5. The higher education institution applies the principles of open science in its activities, processes and acts.			×	

SITE VISIT PROTOCOL

Prvi dan posjeta stručnog povjerenstva visokom učilištu/First day of Site-visit of expert panel members to HEI

***Sveučilište u Zagrebu Geotehnički fakultet*, Hallerova aleja 7, 42000 Varaždin**

	Ponedjeljak, 27. listopada 2025.	**Monday, 27th October, 2025**
10:00– 10:30	Interni sastanak članova Stručnog povjerenstva	Internal meeting of the Expert panel members
10:30 – 11:30	Sastanak s dekanicom, prodekanima i tajnicom Fakulteta	Meeting with the Dean, Vice-deans and Secretary of the Faculty
11:30 – 12:30	Sastanak s predsjednikom i članovima Povjerenstva za upravljanje kvalitetom, voditeljicom Centra za razvoj karijera i voditeljicom Ureda za transfer tehnologija	Meeting with the Quality Assurance Committee, Head of Center for Career Development and Head of Technology Centre Office
12:30 – 14:00	*Radni ručak*	*Working lunch*
14:00 – 15:00	Sastanak s alumnijima (bivši studenti koji nisu zaposlenici visokog učilišta)	Meeting with alumni (former students who are not employed by HEI)

15:00 –15:30	Organizacija dodatnog sastanka o otvorenim pitanjima, prema potrebi	Organisation of an additional meeting on open questions, if needed

Drugi dan posjeta stručnog povjerenstva visokom učilištu/ Second day of Site-visit of expert panel members to HEI

***Sveučilište u Zagrebu Geotehnički fakultet*, Hallerova aleja 7, 42000 Varaždin**

	Utorak, 28. listopada 2025.	**Tuesday, 28th October, 2025**
9:00 – 10:00	Sastanak s prodekanicom za nastavu, predstojnicima zavoda i ECTS koordinatoricom	Meeting with the Vice-Dean for teaching, heads of departments and ECTS coordinator
10:00 – 11:00	Sastanak s nastavnicima (u stalnom radnom odnosu, osim onih na rukovodećim mjestima)	Meeting with full-time employed teachers, except those in managerial positions
11:00– 12:00	Sastanak sa studentima (otvoreni sastanak za sve studente)	Meeting with students (open meeting for all students)
12:00– 13:30	Radni ručak	*Working lunch*
13:30– 15:30	Obilazak fakulteta (predavaonice, informatički laboratoriji, uredi studentskih službi, knjižnica) i prisustvovanje nastavi	Tour of the Faculty (classrooms, IT laboratories, student services, library) and participation in teaching classes
15:30 –16:00	Organizacija dodatnog sastanka o otvorenim pitanjima, prema potrebi	Organisation of an additional meeting on open questions, if needed

Treći dan posjeta stručnog povjerenstva visokom učilištu/ Third day of Site-visit of expert panel members to HEI

***Sveučilište u Zagrebu Geotehnički fakultet*, Hallerova aleja 7, 42000 Varaždin**

	Srijeda, 29. listopada 2025.	Wednesday, 29th October 2025
9:00 – 9:45	Sastanak s prodekanom za znanost i voditeljicom doktorskog studija	Meeting with the Vice-dean for Science and Head of Doctoral study programme
9:45 - 10:45	Sastanak s voditeljima znanstvenih i stručnih projekata	Meeting with the heads of research and professional projects
10:45 – 11:00	Pauza	Break
11:00 – 12:00	Sastanak s asistentima	Meeting with teaching assistants
12:00– 13:30	*Radni ručak*	*Working lunch*
13:30 –14:30	Sastanak s vanjskim dionicima (nenastavnim) s kojima visoko učilište surađuje.	Meeting with external stakeholders (non-teaching) with which the institution cooperates.
14:30–15:00	Organizacija dodatnog sastanka o otvorenim pitanjima – prema potrebi	Organisation of an additional meeting on open questions, if needed
15:00–15:30	Priprema za završni sastanak s upravom	Preparation for the Exit meeting with the Management
15:30–15:45	Završni sastanak s dekanicom, prodekanima i tajnicom Fakulteta	Exit meeting with the Dean, Vice-deans and Secretary of the Faculty

SUMMARY

The Expert Panel notes that the Faculty of Geotechnical Engineering has made visible progress in recent years. Many deficiencies have been addressed, and the Faculty is moving in a positive direction. There is a vision for both short- and long-term development, particularly regarding study programmes and the strategic shift toward Environmental Engineering, which should be developed based on the needs of the labour market and interest in studying. Students benefit from opportunities to develop multidisciplinary knowledge through student-centred learning and teaching practices. They also expressed satisfaction with their study environment and emphasized the positive and supportive atmosphere within the Faculty. The Faculty maintains good cooperation with industry, the municipality, and other stakeholders, contributing to project development, student practice, and solutions to societal challenges. Its contribution is recognised and appreciated by the local community and stakeholders. The Faculty also demonstrates commitment to research projects and outreach activities.

Nevertheless, several areas require further improvement. The small number of students and limited interest in enrolment suggest that the current study programme lacks a sufficiently clear direction. Aligning the Faculty's name with its strategic focus on Environmental Engineering would strengthen identity and visibility. The Faculty should clearly define the role, procedures, and responsibilities of the Quality Assurance Committee. Greater efforts are also needed to promote the doctoral programme and enhance international visibility to attract students from abroad. The academic performance of staff should be improved, both in teaching competencies and in the quality of research publications. Strengthening the project office and providing continuous support to research teams would further enhance project outcomes and increase the Faculty's ability to secure new research grants. Finally, the library's operations and services require significant improvement.