



NATIONAL CENTER FOR
EDUCATIONAL QUALITY
ENHANCEMENT

Accreditation Expert Group Report on Cluster of Higher Education Programmes

1. Bachelor's Educational Program in Agricultural Engineering
2. Bachelor's Educational Program in Environmental Engineering
3. Bachelor's Educational Program in Soil and Water Resources Engineering
4. Master's Educational Program in Environmental Engineering

LEPL - Sokhumi State University

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Information on the Higher educational Institution

Name of Institution Indicating its Organizational Legal Form	LEPL - Sokhumi State University
Identification Code of Institution	205224700
Type of the Institution	University

Expert Panel Members

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I. Information on the Cluster of Educational Programmes

	Programme 1	Programme 2	Programme 3	Programme 4
Name of the educational programme In Georgia	აგროინჟინერია	გარემოსდაცვითი ინჟინერია	წიადაგისა და წყლის რესურსების ინჟინერია	გარემოსდაცვითი ინჟინერია
Name of the educational programme In English	Agricultural Engineering	Environmental Engineering	Soil and Water Resources Engineering	Environmental Engineering
Level of higher education	Bachelor's Studies	Bachelor's Studies	Bachelor's Studies	Master's Studies
Qualification to be awarded	Bachelor of Engineering in Agricultural Engineering	Bachelor of Environmental Engineering	Bachelor of Engineering in Agricultural Engineering	I - Master of Environmental Engineering II - Master of Research in Environmental Engineering
Name and code of the detailed field	Engineering and Engineering Trades – Not Further Classified 0719	Environmental Protection Technology 0712	Engineering and Engineering Trades – Not Further Classified 0719	Environmental Protection Technology 0712
Indication of the right to provide teaching of subject/subjects/group of subjects of the relevant level of general education¹	-	-	-	-

¹ In case of Integrated Bachelor's-Master's Teacher Training Educational Programme and Teacher Training Educational Programme

Language of instruction	Georgian	Georgian	Georgian	Georgian
Number of ECTS credits	241	185	241	60 + 60
Programme Status (Accredited/Non-accredited/Conditionally Accredited/New/International Accreditation) Indicating Relevant Decision (number, date)	NEW	NEW	NEW	NEW

II. Accreditation Report Executive Summary

- **General Information on the Cluster of Education Programmes**

The cluster of educational programmes comprising the Bachelor's programmes in Agricultural Engineering, Environmental Engineering, and Soil and Water Resources Engineering, together with the Master's programme in Environmental Engineering, has been developed by Sokhumi State University (SSU) to provide students with both theoretical knowledge and practical competencies in agroengineering and environmental engineering. The programmes have been designed with reference to comparable international educational programmes and with consideration of national and regional labor market needs. All four programmes are newly established at SSU. Their development was undertaken in accordance with the university's Regulation on the Planning, Development and Improvement of Educational Programmes and was supported by the active involvement of the Faculty Quality Assurance Service and other relevant academic stakeholders. The establishment of these programmes reflects the university's strategic intention to strengthen engineering education and address emerging societal and environmental challenges through interdisciplinary and research-oriented study programmes.

- **Overview of the Accreditation Site Visit**

The site visit was conducted as part of the external accreditation procedure for the cluster of Bachelor's and Master's programmes and took place on 15-16 June 2026. During the visit, the expert panel held meetings with the university administration, the self-assessment group, heads of the programmes, academic and invited staff, employers and other stakeholders, as well as students and alumni. The panel reviewed the self-evaluation reports and supporting documentation, programme specifications and course syllabi, internal quality assurance procedures, evidence of stakeholder involvement, and student assessment materials. In addition, the panel visited the laboratories, library, learning facilities, and digital learning platforms. The meetings and review of documentation enabled the panel to develop a comprehensive understanding of the programmes' objectives, educational processes, resources, and quality assurance mechanisms, which formed the basis for the present evaluation, recommendations, and suggestions.

- **Brief Overview of Education Programme Compliance with the Standards**

The expert panel concludes that the cluster of educational programmes partially complies with the accreditation standards. The programmes establish the necessary institutional foundations and demonstrate SSU's commitment to developing engineering education. However, they do not yet fully meet the expectations and requirements of contemporary engineering education. Significant improvements are required in the design, content, implementation, and continuous enhancement of the programmes to achieve full compliance with the accreditation standards. The strengths of the study programmes include: (1) their relevance to the current educational and labor market needs of Georgia and the necessity to strengthen engineering education capacity in the country; (2) adequate governance and internal quality assurance mechanisms; (3) a well-developed and structured internship programme; and (4) the availability of accredited laboratory. Given that the programmes are newly established, the following areas require further improvement: (1) alignment of programme learning outcomes with contemporary international engineering education standards; (2) modernisation of curricula to strengthen engineering design, emerging technologies, and sustainability-related content; (3)

enhancement of the quality and research orientation of student theses; (4) expansion of library resources; and (5) upgrading of laboratory infrastructure and equipment.

- **Cluster Recommendations**

1. Strengthen the engineering orientation and identity of all programmes. Incorporate advanced engineering approaches, including modelling and simulation, automation, AI technologies, etc. (1.1)
2. A comprehensive revision of the learning outcomes across all study programmes is recommended to ensure alignment with contemporary societal needs, international engineering education standards, and current labor market demands. (1.2)
3. A structured evaluation system should be established, with separate assessment and reporting mechanisms for each study programme, clear performance indicators, regular stakeholder engagement, and documented evidence demonstrating how feedback is incorporated into curriculum development and programme enhancement. (1.3)
4. Undertake a systematic review of course content and ECTS allocation to ensure alignment with contemporary engineering curricula and international educational standards. Strengthen the integration of topics such as systems design, modelling, data analytics, and innovation, and ensure that ECTS credits accurately reflect student workload, course complexity, and intended learning outcomes. (1.5)
5. Strengthen the active involvement of students in scientific conferences, research projects, and other activities to strengthen their academic engagement, research competencies, and professional development. (2.2)
6. Strengthen student consulting and support services by upgrading laboratory infrastructure and equipment, enhancing opportunities for practical and laboratory-based learning, and promoting international mobility through increased awareness activities and targeted support for the development of foreign language competencies. (3.1)
7. To ensure the long-term sustainability and smooth operation of the study programme, it is recommended to strengthen academic staff capacity and expand the teaching workforce, thereby ensuring a more balanced distribution of teaching responsibilities and reducing excessive teaching workloads. The university should also prioritize the recruitment of new (young) professors and early-career academics to support teaching activities and enhance the programmes long-term development and continuity. (4.1)
8. Ensure that staff evaluation and staff satisfaction survey results are systematically translated into an annual professional-development plan for academic, scientific and invited staff, with clear evidence of identified needs, planned activities, participation of staff, resources allocated, implementation results, and follow-up actions. This is necessary because the standard requires that staff-evaluation and satisfaction survey results be actively used for professional improvement and staff-support mechanisms. (4.3)
9. It is recommended that Sokhumi State University ensure that the laboratories and lecturers' working spaces specified within the programmes are located at a single site. (4.4)
10. Develop detailed and thematic targeted budget for each program presented in the cluster. (4.5)

11. It is recommended that Sokhumi State University complete the adaptation and formal adoption of all program-related documentation within its institutional framework and strengthen the self-evaluation process to ensure the systematic identification, analysis, and elimination of deficiencies related to program content, learning resources, staffing, infrastructure, and implementation arrangements (5.1)
12. Provide clearer evidence demonstrating how the cooperation mechanisms established with Georgian Technical University support the effective and sustainable transfer and implementation of the educational programs (5.1)
13. It is recommended that Sokhumi State University update programme-related documentation under the University's name and official format. (5.1)
14. It is recommended the University ensure systematic external collegial developmental evaluations by local and foreign experts. (5.2)
15. It is recommended that the University ensure the monitoring process of educational programmes presented in cluster using the full spectrum of existing monitoring mechanisms. (5.3)

Program 1: Agricultural Engineering - BA

1. Develop analytical, design, and innovation capabilities required of agricultural engineers (1.1)
2. Address real-world agricultural challenges through the application of engineering principles (1.1)
3. The learning outcomes should be revised to ensure that graduates acquire knowledge, competencies, and practical skills in emerging and interdisciplinary areas of agricultural engineering, including soil engineering, plant sciences, food engineering, agronomic practices, digital technologies, precision agriculture, and sustainability principles. (1.2)
4. Modernize the curriculum by benchmarking it against internationally recognized Agricultural Engineering programmes, strengthening its scientific and engineering foundations, and incorporating areas such as soil and water engineering, precision agriculture, digital technologies, automation, sustainability, and engineering design to better align with labour market needs and international standards. In addition, review the curriculum structure and ECTS allocation to ensure a coherent 30 ECTS workload per semester and establish a research-based final dissertation project that develops analytical, experimental, and engineering design competencies. (1.4)
5. Update the study materials and recommended literature to incorporate engineering approaches, modern technologies, international references, and recent scientific developments relevant to agricultural engineering. (1.5)
6. Ensure that the annual staff-development plan includes programme-specific needs related to agro-engineering, agricultural machinery, melioration systems, practical/field training, and assessment of practice-oriented learning outcomes. (4.3)

Program 2: Environmental Engineering - BA

1. Enhance competencies in design, operation, and optimization of environmental systems (1.1)
2. The learning outcomes of the study programme should be broadened to include environmental catalysis, sustainability assessment and modelling, circular economy, climate change, environmental biotechnology, sustainable buildings, and energy systems. (1.2)

3. Undertake curriculum revision and benchmarking exercise against internationally recognized Environmental Engineering programmes to strengthen the engineering identity of the degree. In addition, review the curriculum structure and ECTS allocation to ensure a coherent 30 ECTS workload per semester and establish a research-based final dissertation project that develops analytical, experimental, and engineering design competencies. (1.4)
4. Review the allocation of ECTS credits to ensure consistency with actual student workload, course complexity, level of difficulty, and intended learning outcomes. Ensure that each semester corresponds to 30 ECTS credits and making the necessary adjustments to achieve a more balanced, coherent, and engineering-oriented curriculum structure. (1.5)
5. Ensure that staff-development planning explicitly covers environmental monitoring, pollution-control technologies, laboratory/practical teaching methods, current environmental regulation, and assessment of practice-oriented competencies. (4.3)

Programme 3: Bachelor's Educational Program in Soil and Water Resources Engineering

1. Emphasize the soil-water nexus from the engineering perspective (1.1)
2. For the Bachelor's Educational Program in Soil and Water Resources Engineering, ensure systematic documentation of staff-development activities related to soil science, water resources management, hydrology, irrigation/drainage systems, laboratory methods, and industrial/practical training. (4.3)

Programme 4 Master's Educational Program in Environmental Engineering

1. Streamline the study programme towards a distinct specialization within the environmental engineering domain (1.1)
2. The learning outcomes of the study programme should be structured around clearly defined thematic areas aligned with emerging societal and environmental challenges, including climate change, sustainability and life-cycle analysis, environmental assessment and modelling, and the transition towards a circular and low-carbon economy. (1.2)
3. Redesign the master's programme to establish a clear academic specialization and strategic focus aligned with emerging global environmental challenges and labour market needs. The master's dissertation should be developed as a substantial independent research project closely aligned with the programme's specialization areas. (1.4)
4. Specialize the curriculum around strategic thematic areas such as climate change mitigation and adaptation, sustainability assessment, circular economy, and the transition towards a low-carbon society. (1.5)
5. Provide clear, detailed, and individualised reviews to students that demonstrate their progress and achievements and offer constructive guidance for their further academic and research development. (3.2)
6. Ensure that the university has defined and designated staff for supervising master's students during the preparation of their theses. (4.2)
7. Make sure that supervisors and staff involved in the research component receive targeted professional development in research supervision, research methodology, publication ethics, academic writing, international research cooperation, and the use of modern environmental engineering technologies. This is particularly important because the standard requires support

for scientific/research work and participation in international projects, research and conferences. (4.3)

General Suggestions

- Establish and systematically communicate plagiarism prevention mechanisms, procedures, and the principles of academic ethics through regular information and training activities for students and academic staff. (2.4)
- Develop a concise annual “Staff Development Matrix” for the cluster to connect each programme’s teaching, research and practical-training needs with relevant professional-development activities such as trainings, workshops, peer observation, conference participation, research seminars, international mobility, e-learning/digital teaching training, and methodological support. (4.3)
- It is suggested that the university organize systematic working meetings, consultations, and training activities for academic and invited staff involved in the cluster programs in order to strengthen quality culture, facilitate familiarity with institutional regulations and quality assurance procedures, and support their active participation in programme planning, monitoring, evaluation, and continuous improvement processes. (5.1)

Program Suggestions

Program 1: Agricultural Engineering - BA

- Align programme objectives with labor market demands of the agricultural sector. (1.1)

Program 2: Environmental Engineering – BA

- Align programme objectives with labor market demands of the environmental engineering sector. (1.1)
- Strengthen staff participation in seminars, trainings and conferences related to environmental protection technologies, wastewater/air-pollution treatment methods, ecological monitoring, and digital/laboratory teaching tools. (4.3)

Programme 3: Bachelor’s Educational Program in Soil and Water Resources Engineering

- The study programme should be strengthened by incorporating additional learning outcomes related to watershed management, hydrology, hydrogeology, geochemistry, and geotechnical engineering. (1.2)
- Further strengthen the programme by enhancing its engineering and systems-oriented perspective, with particular emphasis on the soil-water nexus, watershed management, hydrology, hydrogeology, geochemistry, and climate-resilient resource management. (1.4)
- Ensure that ECTS allocation is aligned with international standards. (1.5)

- Create programme-specific professional-development measures for staff focused on modern soil and water resource engineering methods, practical-supervision approaches, applied research, and cooperation with relevant public/private sector organizations. (4.3)

Programme 4 Master's Educational Program in Environmental Engineering

- Ensure that there are at least annual workshops covering supervision planning, feedback practices, assessment of research progress, publication guidance, research ethics, and integration of students into local/international scientific networks. (4.3)
- **Quantitative Data Analysis of the educational programme in accordance with the requirements of the accreditation standards:**

Programme 1 Bachelor's Educational Program in Agricultural Engineering

- **Staff and Supervisors** - Number of the staff involved in the programme (including academic, scientific, international and invited staff) - 31, including the staff holding PhD degree in the sectoral direction - 29; ratio of the academic/scientific staff and invited staff- 25/6; ratio of the affiliated and academic staff-25/25.
- **Scientific/Research Indicators** - Scientific/research index of the individuals, involved in the programme (for the last 5 years): quantitative data papers published in peer-reviewed journals with an international index²; staff participation rates in local and international conferences; other scientific/research indicators.

Total number of published papers - 1079

Total number of conference participations - 280

Total number of grants - 46

Total number of patents and inventions - 39

- **Academic Staff Turnover Rate** (for the last 5 years) (e.g. the number of retired staff, the number of staff who left the institution and the number of new staff, etc.).

Non-available based on the presented data

- **Data on the Individuals Enrolled** (for the last 5 years; in case of active programmes); number of student places announced for the programme; student progression by academic years.

Non-available – the programs are new

- **Analysis of other quantitative data provided in the self-assessment and annexes.**

Non-available based on the presented data

² In case of doctoral program grouped into a cluster should be indicated as a separate analysis.

Programme 2 Bachelor's Educational Program in Environmental Engineering

- **Staff and Supervisors** - Number of the staff involved in the programme (including academic, scientific, international and invited staff) - 29, including the staff holding PhD degree in the sectoral direction - 23; ratio of the academic/scientific staff and invited staff- 18/11; ratio of the affiliated and academic staff-18/18.
- **Scientific/Research Indicators** - Scientific/research index of the individuals, involved in the programme (for the last 5 years): quantitative data papers published in peer-reviewed journals with an international index³; staff participation rates in local and international conferences; other scientific/research indicators.

Total number of published papers - 603

Total number of conference participations - 185

Total number of grants - 23

- **Total number of patents and inventions - 9** **Academic Staff Turnover Rate** (for the last 5 years) (e.g. the number of retired staff, the number of staff who left the institution and the number of new staff, etc.).

Non-available based on the presented data

- **Data on the Individuals Enrolled** (for the last 5 years; in case of active programmes); number of student places announced for the programme; student progression by academic year.

Non-available – the programs are new

- **Analysis of other quantitative data provided in the self-assessment and annexes.**

Non-available based on the presented data

Programme 3 Bachelor's Educational Program in Soil and Water Resources Engineering

- **Staff and Supervisors** - Number of the staff involved in the programme (including academic, scientific, international and invited staff) - 31, including the staff holding PhD degree in the sectoral direction - 24; ratio of the academic/scientific staff and invited staff- 24/7; ratio of the affiliated and academic staff-24/24.
- **Scientific/Research Indicators** - Scientific/research index of the individuals, involved in the programme (for the last 5 years): quantitative data papers published in peer-reviewed journals with an international index⁴; staff participation rates in local and international conferences; other scientific/research indicators.

³ In case of doctoral program grouped into a cluster should be indicated as a separate analysis.

⁴ In case of doctoral program grouped into a cluster should be indicated as a separate analysis.

Total number of published papers - 1187

Total number of conference participations - 340

Total number of grants - 79

- **Total number of patents and inventions – 30** **Academic Staff Turnover Rate** (for the last 5 years) (e.g. the number of retired staff, the number of staff who left the institution and the number of new staff, etc.).

Non-available based on the presented data

- **Data on the Individuals Enrolled** (for the last 5 years; in case of active programmes); number of student places announced for the programme; student progression by academic years.

Non-available – the programs are new

- **Analysis of other quantitative data provided in the self-assessment and annexes.**

Non-available based on the presented data

Programme 4 Master's Educational Program in Environmental Engineering

Staff and Supervisors - Number of the staff involved in the programme (including academic, scientific, international and invited staff) - 16, including the staff holding PhD degree in the sectoral direction - 12; ratio of the academic/scientific staff and invited staff- 9/7; ratio of the affiliated and academic staff-9/9; ratio of master's and/or doctoral students to supervisors – 5/5.

- **Scientific/Research Indicators** - Scientific/research index of the individuals, involved in the programme (for the last 5 years): quantitative data papers published in peer-reviewed journals with an international index⁵; staff participation rates in local and international conferences; other scientific/research indicators.

Total number of published papers - 493

Total number of conference participations - 170

Total number of grants - 16

- **Total number of patents and inventions – 5** **Academic Staff Turnover Rate** (for the last 5 years) (e.g. the number of retired staff, the number of staff who left the institution and the number of new staff, etc.).

Non-available based on the presented data

- **Data on the Individuals Enrolled** (for the last 5 years; in case of active programmes); number of student places announced for the programme; student progression by academic years.

⁵ In case of doctoral program grouped into a cluster should be indicated as a separate analysis.

Non-available – the programs are new

- Analysis of other quantitative data provided in the self-assessment and annexes.
Non-available based on the presented data

- Brief Overview of the Best Practices (if applicable)⁶
 - **Information on Sharing or Not Sharing the Argumentative Position of the HEI**
The expert panel agrees on sharing the Argumentative Position of the LEPL - Sokhumi State University and acknowledges its commitment to the continuous development and improvement of the study programmes. The explanations and supporting evidence are considered adequate and consistent with the accreditation standards, demonstrating a clear understanding of future development priorities. The final report remains unchanged, including all recommendations and suggestions provided by the expert panel.
 - **In case of re-accreditation, a brief overview of significant achievements and/or progress (if applicable) during the accreditation period, as well as a review of the fulfillment of the recommendations received during the previous evaluation process**

⁶ A practice that is exceptionally effective and that can serve as a benchmark or example for other educational programme/programmes.

Requirements set by the [Framework of Doctoral Education](#) are used during the accreditation evaluation of the doctoral educational programme together with the [accreditation standards](#) of higher educational programmes.

[Guidelines and Standards \(See link\)](#)

[Accreditation Standards for Higher Education Programmes](#)

[Guideline for Assessment of Accreditation Standards of Higher Education Programmes](#)

[Framework for Doctoral Education](#)

[Alignment of the Accreditation Standards and Framework for Doctoral Education](#)

[Assessment criteria](#)

Definitions:

Recommendations - should be considered by the HEI in order to comply the programme with the requirements of the standard

Suggestions - non-binding suggestions for the programme development

Evaluation approaches for the accreditation experts:

The components of the accreditation standards are evaluated using the following two approaches: cluster and if necessary individual evaluation.

Evaluation Approaches:

Cluster evaluation: Describe, analyse, and evaluate the compliance of educational programmes grouped in the cluster with the requirements of the corresponding component of the standard taking into account the general characteristics of the cluster.

Individual evaluation: If necessary, also you can indicate the information on each individual education programme, distinguished from the general and major characteristics of the education programmes in a cluster. Conducting an individual evaluation of the program is essential for doctoral-level educational programs, as well as for any other educational program that is subject to a recommendation and/or suggestion.

III. Summary Table of Compliance of the programmes with the standards

Nº	Contents/ Standard	Programme 1	Programme 2	Programme 3	Programme 4
1.	Educational Programme Objectives, Learning Outcomes and their Compliance with the Programme	Partially	Partially	Substantially	Partially
1.1	Programme Objectives	Partially	Partially	Substantially	Partially
1.2	Programme Learning Outcomes	Partially	Partially	Substantially	Partially
1.3	Evaluation Mechanism of the Programme Learning Outcomes	Partially	Partially	Partially	Partially
1.4	Structure and Content of Educational Programme	Partially	Partially	Complies	Partially
1.5	Academic Course/Subject	Partially	Partially	Substantially	Partially
2.	Methodology and Organization of Teaching, Adequacy of Evaluation of Programme Mastering	Substantially	Substantially	Substantially	Substantially
2.1	Programme Admission Preconditions	Complies	Complies	Complies	Complies
2.2	The Development of Practical,	Substantially	Substantially	Substantially	Substantially

	Scientific/Research/ Creative/ Performance and Transferable Skills				
2.3	Teaching and Learning Methods	Complies	Complies	Complies	Complies
2.4	Student9 Evaluation	Substantially	Substantially	Substantially	Substantially
3.	Student Achievements and Individual Work with Them	Substantially	Substantially	Substantially	Substantially
3.1	Student Consulting and Support Services	Substantially	Substantially	Substantially	Substantially
3.2	Master's and Doctoral Student Supervision	-	-	-	Substantially
4	Providing Teaching Resources	Partially	Partially	Partially	Partially
4.1	Human Resources	Substantially	Substantially	Substantially	Substantially
4.2	Qualification of Supervisors of Master's and Doctoral Student	N/A	N/A	N/A	Substantially
4.3	Professional Development of Academic, Scientific and Invited Staff	Partially	Partially	Partially	Partially
4.4	Material Resources	Partially	Partially	Partially	Partially
4.5	Programme/Faculty/Scho ol Budget and	Substantially	Substantially	Substantially	Substantially

	Programme Financial Sustainability				
5	5. Teaching Quality Enhancement Opportunities	Substantially	Substantially	Substantially	Substantially
5.1	Internal Quality Evaluation	Substantially	Substantially	Substantially	Substantially
5.2	External Quality Evaluation	Substantially	Substantially	Substantially	Substantially
5.3	Programme Monitoring and Periodic Review	Substantially	Substantially	Substantially	Substantially

IV. Compliance of the Programme with Accreditation Standards

1. Educational Programme Objectives, Learning Outcomes and their Compliance with the Programme

A programme has clearly established objectives and learning outcomes, which are logically connected to each other. Programme objectives are consistent with the mission, objectives and strategic plan of the institution. Programme learning outcomes are assessed on a regular basis to improve the programme. The content and consistent structure of the programme ensure the achievement of the set goals and expected learning outcomes.

Educational programmes grouped in a cluster are logically interrelated to each other in line with the study fields and evolve according to the respective levels of higher education.

1.1 Programme Objectives

Accreditation standards indicators

Programme objectives consider the specificity of the field of study, level and an educational programme, and define the set of knowledge, skills and competences a programme aims to develop in graduate students. They also illustrate the contribution of the programme to the development of the field and society.

PhD programme indicators

- The goals of the PhD educational programme are focused on the creation of new knowledge and/or development of existing one, promotion of knowledge realization and dissemination through the implementation of original, modern and innovative researches;
- The artistic-creative doctoral educational programme is a doctoral educational programme based on performing and/or creative practice, the goal of which is to create an original project of international level with a research component, which clearly shows the independent creative vision of the doctoral student, demonstrates his/her professional field competences and new knowledge obtained as a result of creative research;
- The goal of the doctoral program is to promote the preparation of doctoral students for independent research and scientific activities by enhancing research skills, as well as cooperation using interdisciplinary approaches, taking into account the research topic;
- The goals of the doctoral educational programme are in line with the implementation strategy of the scientific-research/creative research activities of the HEI/basic educational.

Summary and Analysis of the Compliance of the Educational Programmes Grouped in a Cluster with the Requirements of the Standard Component

Cluster evaluation

Description and Analysis of Cluster

The SER provides a brief overview of the objectives of the three bachelor's programmes and one master's programme grouped within the cluster. The programme objectives partially address current needs in

engineering education. The Agricultural Engineering programme emphasizes machinery technologies, the Environmental Engineering programme focuses on environmental protection and monitoring, and the Soil and Water Engineering programme addresses soil conservation and water resources management. However, the engineering dimension of the programmes is not sufficiently articulated. As programmes offered within engineering schools, they should place greater emphasis on the application of engineering principles, system design, technological innovation, and analytical problem solving.

The current objectives tend to focus on knowledge acquisition and operational aspects rather than on the development of competencies related to the design, optimization, and management of complex engineering systems. Strengthening the engineering perspective across all programmes would enhance their coherence within the engineering school framework and better prepare graduates for professional roles.

Individual evaluation - An individual evaluation of the doctoral educational program or of the educational program for which a recommendation and/or advice is issued.

Programme 1 - Bachelor's Educational Program in Agricultural Engineering: The objectives of the Bachelor's Educational Programme in Agricultural Engineering (Agroengineering) currently place significant emphasis on machinery technologies and technical training, with limited focus on developing the broader scientific and engineering competencies expected of agricultural engineering graduates. Several core areas of contemporary agricultural engineering appear to be underrepresented in the programme objectives, including soil science and engineering, agricultural system design, food engineering, agronomy and crop production systems, automation, robotics, and precision agriculture, digital technologies, and smart farming solutions.

The objectives of existing study programme appear to focus on preparing graduates for operational and farming-related activities rather than developing the analytical, design, and innovation capabilities required of agricultural engineers. To align with international standards and current labour market demands, the programme should reorient its objectives towards addressing real-world agricultural challenges through engineering approaches. Emphasis should be placed on sustainable agricultural production, technological innovation, and the integration of modern technologies into agricultural systems. Such revisions would strengthen the programme's identity as an engineering discipline and better prepare graduates for careers in industry, research, consultancy, and advanced studies.

Programme 2 - Bachelor's Educational Program in Environmental Engineering: The objectives of the Bachelor's Educational Programme in Environmental Engineering provide a general foundation in environmental protection and monitoring. The programme appropriately addresses topics related to ecological monitoring, pollution control, and waste treatment technologies. However, several key areas that are considered basic components of environmental engineering education are either insufficiently

represented or absent from the programme objectives. These include energy engineering and renewable energy systems, wastewater collection, treatment, and system design, hydrology and water resources engineering, environmental legislation, sustainable buildings and energy efficiency, environmental catalysis, environmental biotechnology and bioprocess engineering, climate change mitigation, environmental risk modelling, etc.

To align with international standards and labour market requirements, the programme should strengthen its engineering focus and aim to develop graduates' competencies in the design, operation, and optimization of environmental systems, along with the technical skills in spatial analysis.

Programme 3 - Bachelor's Educational Program in Soil and Water Resources Engineering: The objectives of the Bachelor's Educational Programme in Soil and Water Engineering are generally well articulated, particularly regarding soil protection, water resources management, and the application of modern technologies in agro-industrial systems. However, the interdisciplinary nexus between soil and water resources is not sufficiently emphasized within the programme objectives. The interactions between soil properties, hydrological processes, and water management practices should constitute a central element of the programme's educational framework. Several areas require stronger representation, including the hydrological cycle and its application to soil systems, soil-water interactions and vadose zone processes, surface water and groundwater dynamics, hydrogeology and watershed management, geochemistry, and nutrient cycling, irrigation and drainage system design, and modelling and monitoring of soil and water systems.

To align with scientific and engineering challenges, the programme should explicitly promote an integrated approach to soil and water resource management. Greater emphasis should be placed on understanding the physical, chemical, biological, and hydrological processes governing soil-water systems and their role in sustainable agricultural production and environmental protection.

Programme 4 - Master's in Environmental Engineering: The objectives of the Master's Educational Programme in Environmental Engineering are clearly defined and appropriately focus on environmental protection and the development and application of environmental technologies. However, the programme objectives remain relatively broad and do not sufficiently reflect a distinct area of specialization. In its current form, the programme may benefit from a more focused strategic direction that aligns with emerging global challenges, labour market demands, and recent developments in environmental engineering. Particular emphasis should be placed on themes such as climate change mitigation and adaptation, sustainability, resource efficiency, and the transition towards a circular and low-carbon economy.

Evidences/Indicators

- Educational Programs:
- Bachelor's Educational Program in "Agroengineering";
- Bachelor's Educational Program in "Environmental Engineering";
- Bachelor's Educational Program in "Soil and Water Resources Engineering";
- Master's Educational Program in "Environmental Engineering";
- Analysis of labor market and employer requirements;

Recommendations and Suggestions according to the programmes:	<u>Recommendation(s):</u> Please, write the developed recommendations that apply equally to the educational programmes grouped in the cluster. Also, please indicate, according to individual programs (if any)	<u>Suggestion(s):</u> Please, write the developed suggestions that apply equally to the educational programmes grouped in the cluster. Also, please indicate, according to individual programs (if any)
General recommendations/ Suggestion of the Cluster	- Strengthen the engineering orientation and identity of all programmes. Incorporate advanced engineering approaches, including modelling and simulation, automation, AI technologies, etc.	
Programme 1 Bachelor's Educational Program in Agricultural Engineering	- Develop analytical, design, and innovation capabilities required of agricultural engineers. - Address real-world agricultural challenges through the application of engineering principles.	- Align programme objectives with labor market demand of the agricultural sector.
Programme 2 Bachelor's Educational Program in Environmental Engineering	- Enhance competencies in design, operation, and optimization of environmental systems.	- Align programme objectives with labor market demand of the environmental engineering sector.
Programme 3 Bachelor's Educational Program in Soil and Water Resources Engineering	- Emphasize the soil-water nexus from the engineering perspective	
Programme 4 Master's Educational Program in Environmental Engineering	- Streamline the study programme towards a distinct specialization within the environmental engineering domain	

Evaluation ⁷

Please, evaluate the compliance of the programme with the component

Component 1.1 - Programme Objectives	Evaluation
Programme 1 Bachelor's Educational Program in Agricultural Engineering	Partially
Programme 2 Bachelor's Educational Program in Environmental Engineering	Partially
Programme 3 Bachelor's Educational Program in Soil and Water Resources Engineering	Substantially
Programme 4 Master's Educational Program in Environmental Engineering	Partially

1.2 Programme Learning Outcomes

Accreditation standards indicators

-
- The learning outcomes of the programme are logically related to the programme objectives and the specificity of the field of study.
 - Programme learning outcomes describe knowledge, skills, and/or sense of responsibility and autonomy which students gain upon completion of the programme.
-

PHD Programme indicators

- The learning outcomes of the doctoral educational programme are logically related to the goals of the educational programme and correspond to the classifier of the 8th level of qualification;
 - The results of the doctoral thesis, creative/performing project at the local and/or international level have scientific-research/creative-research significance, are innovative and have practical/theoretical value.
-

⁷ Evaluation is performed for each programme separately.

Summary and Analysis of the Compliance of the Educational Programmes Grouped in a Cluster with the Requirements of the Standard Component

Cluster evaluation

Description and Analysis of Cluster

The learning outcomes of the study programmes grouped within the cluster are only partially aligned with the programme objectives and exhibit significant shortcomings. Although the programmes define expected knowledge and skills, the learning outcomes do not adequately reflect current societal needs, technological developments, or evolving labor market demands. They lack emphasis on the advanced engineering competencies required in agricultural, environmental, and soil and water engineering practices.

The existing learning outcomes appear to focus predominantly on technical and operational skills, resembling those typically associated with vocational or technical education rather than university-level engineering programmes. As a result, they do not sufficiently promote higher-order competencies such as systems thinking, engineering design, innovation, critical analysis, interdisciplinary problem-solving, and the application of emerging technologies.

Furthermore, the learning outcomes do not clearly demonstrate alignment with international engineering education standards or comparable programmes offered by leading universities. Consequently, graduates may face limitations in their professional development, international mobility, and competitiveness in both academic and industrial environments.

Individual evaluation - An individual evaluation of the doctoral educational program or of the educational program for which a recommendation and/or advice is issued.

Programme 1 - Bachelor's Educational Program in Agricultural Engineering: The learning outcomes of the Bachelor's Educational Programme in Agricultural Engineering are primarily focused on machinery technologies and water management systems. These areas constitute important components of agricultural engineering, but the current learning outcomes do not adequately reflect the interdisciplinary nature of modern agricultural engineering education. Several essential domains are underrepresented or absent, including soil engineering, plant and crop sciences, food engineering, agronomic practices, precision agriculture, automation, digital technologies, and sustainability principles.

Furthermore, although irrigation and drainage systems are addressed, the programme does not sufficiently emphasize the engineering design, modelling, optimization, and management of these systems. The learning outcomes should explicitly demonstrate graduates' ability to apply engineering principles to the design and operation of agricultural infrastructure and technologies.

Programme 2 - Bachelor's Educational Program in Environmental Engineering: The learning outcomes of the Bachelor's Educational Programme in Environmental Engineering are primarily focused on fundamental areas such as environmental pollution, purification technologies, environmental analysis, ecology, climate, and environmental monitoring. These topics provide the foundation of the environmental engineering programme, but the current learning outcomes do not adequately reflect the breadth and complexity of environmental engineering education.

The programme lacks essential engineering competencies related to the design, modelling, optimization, and management of environmental systems. In particular, the learning outcomes do not sufficiently address graduates' ability to apply engineering principles and quantitative methods to solve complex environmental challenges. Furthermore, several emerging and internationally relevant areas are underrepresented or absent, including environmental catalysis, sustainability assessment, circular economy, climate change mitigation and adaptation, environmental biotechnology, sustainable buildings, and energy systems.

The current learning outcomes also provide limited evidence that graduates will develop practical problem-solving, interdisciplinary collaboration, and innovation skills expected in modern environmental engineering programmes.

Programme 3 - Bachelor's Educational Program in Soil and Water Resources Engineering: The learning outcomes of the Bachelor's Educational Programme in Soil and Water Engineering focus primarily on soil science, water resources management, and agroengineering. Overall, the learning outcomes are consistent with the stated programme objectives and provide a sound foundation in the core disciplines of the field. However, the integrated soil-water nexus should be more explicitly emphasized throughout the programme. Contemporary soil and water engineering requires a systems-based approach that recognizes the complex interactions between soil properties, hydrological processes, water quality, and land management practices.

Several important areas should be further strengthened within the learning outcomes, including watershed management, hydrology, hydrogeology, geochemistry, and geotechnical engineering. Greater emphasis should also be placed on the application of engineering principles to the analysis, modelling, design, and management of soil and water systems.

Programme 4 - Master's in Environmental Engineering: The learning outcomes of the Master's Educational Programme in Environmental Engineering are broad and encompass a wide range of topics, including environmental pollution, process development, and environmental technologies. This comprehensive approach provides students with exposure to multiple areas of environmental engineering, but the learning outcomes lack the level of specialization and advanced focus expected of a master's programme.

The current learning outcomes do not sufficiently define a distinct academic or professional profile for graduates and may limit the programme's ability to differentiate itself from undergraduate programmes or comparable international master's programmes. To enhance its relevance and competitiveness, the programme should establish clearer thematic priorities aligned with contemporary societal and environmental challenges. Greater emphasis should be placed on advanced competencies related to climate change mitigation and adaptation, sustainability, environmental assessment and modelling, and the transition towards a circular and low-carbon economy. It is recommended to replace foreign language classes with the relevant courses to strengthen the lineage with the overall learning outcomes of the programme.

Evidences/Indicators

- Educational Programs:
- Bachelor's Educational Program in "Agroengineering";
- Bachelor's Educational Program in "Environmental Engineering";
- Bachelor's Educational Program in "Soil and Water Resources Engineering";
- Master's Educational Program in "Environmental Engineering";
- Analysis of labor market and employer requirements;

Recommendations and Suggestions according to the programmes:	<u>Recommendation(s):</u> Please, write the developed recommendations that apply equally to the educational programmes grouped in the cluster. Also, please indicate, according to individual programs (if any)	<u>Suggestion(s):</u> Please, write the developed suggestions that apply equally to the educational programmes grouped in the cluster. Also, please indicate, according to individual programs (if any)
General recommendations/ Suggestion of the Cluster	A comprehensive revision of the learning outcomes across all study programmes is recommended to ensure alignment with contemporary societal needs, international engineering education standards, and current labor market demands.	
Programme 1 Bachelor's Educational Program in Agricultural Engineering	The learning outcomes should be revised to ensure that graduates acquire knowledge, competencies, and practical skills in emerging and interdisciplinary areas of agricultural engineering, including soil engineering, plant sciences, food engineering, agronomic practices,	

	digital technologies, precision agriculture, and sustainability principles.	
Programme 2 Bachelor's Educational Program in Environmental Engineering	The learning outcomes of the study programme should be broadened to include environmental catalysis, sustainability assessment and modelling, circular economy, climate change, environmental biotechnology, sustainable buildings, and energy systems.	
Programme 3 Bachelor's Educational Program in Soil and Water Resources Engineering		The study programme should be strengthened by incorporating additional learning outcomes related to watershed management, hydrology, hydrogeology, geochemistry, and geotechnical engineering.
Programme 4 Master's Educational Program in Environmental Engineering	The learning outcomes of the study programme should be structured around clearly defined thematic areas aligned with emerging societal and environmental challenges, including climate change, sustainability and life-cycle analysis, environmental assessment and modelling, and the transition towards a circular and low-carbon economy.	

Evaluation

Please, evaluate the compliance of the programme with the component

Component 1.2 Programme Learning Outcomes	Evaluation
Programme 1 (name, level)	Partially
Programme 2 (name, level)	Partially
Programme 3 (name, level)	Substantially
Programme 4 (name, level)	Partially

1.3 Evaluation Mechanism of the Programme Learning Outcomes

Accreditation standards indicators

- Evaluation mechanisms of the programme learning outcomes are defined. The programme learning outcomes assessment process consists of defining, collecting and analyzing data necessary to measure learning outcomes.
 - Programme learning outcomes assessment results are utilized for the improvement of the programme.
-

Summary and Analysis of the Compliance of the Educational Programmes Grouped in a Cluster with the Requirements of the Standard Component

Cluster evaluation

Description and Analysis of Cluster

The intended learning outcomes of the study programmes can generally be achieved, as they are clearly defined and supported by course assessment mechanisms. Each course syllabus specifies the assessment forms, methods, and evaluation criteria used to measure the achievement of the corresponding learning outcomes. This provides a transparent framework for monitoring student performance and ensuring consistency in the assessment process. In addition to direct assessment methods, indirect assessment mechanisms are established involving staff/faculty members, students, graduates, and employers (stakeholders). These mechanisms are intended to provide feedback on programme effectiveness, graduate preparedness, and the relevance of the learning outcomes to labor market needs. However, the experts were unable to identify sufficient evidence provided by the higher education institution (HEI) demonstrating labour market demand specifically for agroengineers and environmental engineers, as the submitted documentation referred only to general needs within the agricultural and hydrology sectors.

Employer surveys are conducted to evaluate graduate employability, professional development, and the alignment of acquired competencies with workplace requirements. Stakeholders also provide feedback and share professional experiences that may contribute to programme enhancement. However, the evaluation process lacks a systematic programme-level approach. The survey findings are presented collectively for the cluster of programmes rather than separately for each individual study programme. As a result, it is difficult to identify programme-specific strengths, weaknesses, and areas requiring improvement.

Furthermore, the study programmes are relatively new, and therefore there is limited evidence from graduates who have completed these specific programmes. During meetings with employers and other stakeholders, several competency gaps and labor market needs were identified. Nevertheless, there is insufficient evidence demonstrating that this feedback has been systematically analysed and translated into curriculum revisions or improvements to programme learning outcomes.

Graduate surveys indicate that respondents generally perceive themselves as adequately qualified and competent to enter the labor market. Although the findings are positive, the surveys provide limited programme-specific information and do not generate concrete recommendations for curriculum development or continuous improvement. Consequently, their contribution to the evaluation of programme learning outcomes remains relatively limited.

Similarly, academic staff have actively participated in the development and implementation of the study programmes and have contributed to the definition of the intended learning outcomes. However, faculty feedback is also presented at the cluster level, making it difficult to evaluate the effectiveness and relevance of individual programmes.

The existing evaluation mechanisms provide a basic framework for assessing programme learning outcomes. The evidence collected through stakeholder surveys and feedback processes is not sufficiently detailed, programme-specific, or systematically analysed to support robust quality assurance and continuous improvement. A structured evaluation system should be established, with separate assessment and reporting mechanisms for each study programme, clear performance indicators, regular stakeholder engagement, and documented evidence demonstrating how feedback is incorporated into curriculum development and programme enhancement.

Individual evaluation - An individual evaluation of the doctoral educational program or of the educational program for which a recommendation and/or advice is issued.

See cluster evaluation

Evidences/Indicators

- Component evidences/indicators, including the relevant documents and interview results
- Educational Programs:
 - Bachelor's Educational Program in "Agroengineering";
 - Bachelor's Educational Program in "Environmental Engineering";
 - Bachelor's Educational Program in "Soil and Water Resources Engineering";
 - Master's Educational Program in "Environmental Engineering";
 - "Mechanisms for Quality Assurance Development," approved by the Academic Council of the university, together with the relevant questionnaires;
- 13. Analysis of the results of internal and external quality assurance evaluations

Recommendations and Suggestions according to the programmes:	<u>Recommendation(s):</u> Please, write the developed recommendations that apply equally to the educational programmes grouped in the cluster. Also, please indicate, according to individual programs (if any)	<u>Suggestion(s):</u> Please, write the developed suggestions that apply equally to the educational programmes grouped in the cluster. Also, please indicate, according to individual programs (if any)
General recommendations/ Suggestion of the Cluster	A structured evaluation system should be established, with separate assessment and reporting mechanisms for each study programme, clear performance indicators, regular stakeholder engagement, and documented evidence demonstrating how feedback is incorporated into curriculum development and programme enhancement.	
Programme 1 (name, level)		
Programme 2 (name, level)		
Programme 3 (name, level)		
Programme 4 (name, level)		

Evaluation

Please, evaluate the compliance of the programme with the component

Component <u>1.3 Evaluation Mechanism of the Programme Learning Outcomes</u>	Evaluation
Programme 1 (name, level)	Partially
Programme 2 (name, level)	Partially
Programme 3 (name, level)	Partially
Programme 4 (name, level)	Partially

1.4. Structure and Content of Educational Programme

Accreditation standards indicators

- The programme is designed according to HEI's methodology for planning, designing and developing of educational programmes.
- The programme structure is consistent and logical. The content and structure ensure the achievement of the programme learning outcomes. The qualification to be awarded is corresponding to the programme content and learning outcomes.

PHD Programme indicators

- The basis for the development of the doctoral educational programme is the research potential of the higher education institution, the existence of previous scientific-research activity experience in the relevant direction, successful practice and research results;
- The doctoral educational programme contributes to the development of scientific-research activities at the HEI and the formation of field-related, scientific collaboration and professional connections;
- The contents of the doctoral educational programme, depending on the peculiarities of the study area, ensures the intellectual, social, cultural, economic, technological, industrial and/or other types development of science/field, state and/or society;
- The teaching component of the doctoral educational programme contributes to the implementation of the scientific-research component of the doctoral student in an appropriate degree through the development of transferable skills and/or by deepening the knowledge of the doctoral student on current issues/trends in the field. It also provides methodological guidelines for the proper planning and implementation of the research component;
- The content of the doctoral educational programme leads to the formation of important innovative approaches, that will contribute to the development of cooperation between scientific fields using interdisciplinary approaches, taking into account the specifics of the research field;
- The doctoral education programme promotes the development of such competences and transferable skills for doctoral students as: planning and implementation of research-scientific activities, finding and administering grants, project management, planning and implementation of creative/performing projects, engaging into the technological transfer through implementation of the research outcomes, leadership, supervision, career development planning, critical analysis of scientific literature, data analysis, teaching (pedagogical skills), expressing opinions in popular scientific language, etc.;
- To effectively implement the research component of the doctoral education programme, the HEI has developed: the mechanism for selecting and changing the research topic and implementing/presenting the scientific-research component, which, following the research field/fields of the educational programme and taking into account the interests of the doctoral students, ensures that the scientific-research component is performed by the doctoral student at an appropriate level, taking into account the adherence of academic integrity mechanisms;
- The individual research plan of the doctoral student takes into account - research aim, the structure of the doctoral thesis and the estimated schedule/timetable of the research implementation, research methodology and so on. The research plan supports the doctoral student to conduct his/her activities in accordance with the research topic and to complete the doctoral thesis within the time limit established by the law;

- The ethical norms of scientific-research activity are adhered to in the HEI, which take into account the local and international standards of research ethics in the relevant field.

Summary and Analysis of the Compliance of the Educational Programmes Grouped in a Cluster with the Requirements of the Standard Component

Cluster evaluation

Description and Analysis of Cluster

According to the SER, the study programmes have been developed in accordance with the academic rules of Sokhumi State University. Each programme is assigned to an appropriate classification in compliance with the requirements of the Ministry of Education, Science, Culture and Sport of Georgia. The awarded qualifications are aligned with the programme content and the intended learning outcomes. However, several inconsistencies were identified regarding the structure of the study programmes, the distribution of study components, and the allocation of ECTS credits. Although the programmes comply with national requirements, the balance between engineering courses, specialized courses, elective modules, and practical training does not fully reflect contemporary trends in engineering education or the expectations of modern labour markets.

The allocation of ECTS credits among study components does not appear to correspond to the complexity, workload, and importance of the respective courses. In some cases, the curriculum structure lacks coherence and does not adequately support the progressive development of advanced engineering competencies. Therefore, a comprehensive review of the curriculum structure, study components, and ECTS distribution is recommended to ensure stronger alignment with modern engineering programmes, international educational practices, and the intended learning outcomes of the study programmes, including the reallocation of credits from foreign language classes to other technical courses as described in the evaluation of standard 1.2.

Individual evaluation - An individual evaluation of the doctoral educational program or of the educational program for which a recommendation and/or advice is issued.

Programme 1 - Bachelor's Educational Program in Agricultural Engineering: The Bachelor's Educational Programme in Agricultural Engineering exhibits structural weaknesses, primarily due to its strong emphasis on machinery-related courses. The curriculum appears to have evolved from a former technical school and retains many characteristics associated with vocational or technical training rather than a modern university-level engineering programme. A significant proportion of the curriculum is oriented towards operational agricultural practices and farmer training, while insufficient attention is given to the scientific, analytical, and engineering competencies expected of agricultural engineers. The programme

does not adequately prepare graduates to address complex agricultural challenges through engineering design, innovation, and technology development.

The curriculum should be revised and benchmarked against leading international agricultural engineering programmes. Attention should be given to strengthening the engineering and scientific foundations of the programme and ensuring alignment with current technological developments and labour market demands.

In addition, the curriculum structure and ECTS allocation require further review. Each semester should consistently correspond to 30 ECTS credits, and the final dissertation project should be clearly reflected within the ECTS distribution. The final dissertation should be designed as an independent research-based project that allows students to demonstrate analytical, experimental, and engineering design competencies. Although practical training in agricultural settings is an important component of the programme, greater emphasis should also be placed on laboratory-based education, research activities, and project-based learning. Students should have opportunities to engage in experimental work, engineering design projects, and applied research that strengthen their problem-solving abilities and scientific understanding.

Substantial curriculum modernization is required to transform the programme from a predominantly technical and practice-oriented curriculum into a contemporary agricultural engineering programme aligned with international standards and engineering education principles.

Programme 2 - Bachelor's Educational Program in Environmental Engineering: The Bachelor's Educational Programme in Environmental Engineering is structured as a three-year programme (six semesters) with a total workload of 185 ECTS credits. The programme covers fundamental topics related to environmental sciences, but it demonstrates significant weaknesses from an environmental engineering perspective. The current curriculum is largely centered on basic environmental science, ecology, environmental monitoring, and pollution-related topics, with limited emphasis on engineering principles, system design, process optimization, modelling, and technological innovation. As a result, the programme does not adequately reflect the profile and competencies expected from a modern environmental engineering degree.

The curriculum should undergo a comprehensive revision and be benchmarked against leading international environmental engineering programmes. Attention should be given to strengthening the engineering and scientific foundations of the programme and ensuring alignment with contemporary technological developments, sustainability challenges, and labor market needs. The curriculum should incorporate additional engineering-oriented courses in areas such as water and wastewater engineering, air pollution control engineering, solid and hazardous waste engineering, environmental process design and modelling, environmental catalysis and advanced treatment technologies, sustainable energy and environmental systems, environmental impact and sustainability assessment, etc. In addition, the ECTS allocation should be reviewed to ensure consistency with international higher education practices, with

each semester corresponding to 30 ECTS credits and a clear progression of learning outcomes throughout the programme.

The final dissertation should be formally integrated into the curriculum and designed as an independent research-based project that enables students to demonstrate analytical, experimental, and engineering design competencies. Furthermore, students should be provided with greater opportunities to participate in laboratory work, engineering design projects, field investigations, and applied research activities that strengthen their scientific understanding and problem-solving skills. Substantial curriculum modernization is required to establish a stronger engineering identity and to ensure that graduates possess the knowledge, skills, and competencies expected from contemporary environmental engineering programmes offered by internationally recognized universities.

Programme 3 - Bachelor's Educational Program in Soil and Water Resources Engineering: The Bachelor's Educational Programme in Soil and Water Resources Engineering is structured as a four-year programme (eight semesters) and, overall, presents a coherent and well-organized curriculum. The programme provides a solid foundation in soil science, water resources management, and agroengineering, and demonstrates better alignment between programme objectives, learning outcomes, and curriculum content than the other programmes within the cluster.

Nevertheless, several areas require further refinement. Greater emphasis should be placed on the soil-water nexus, which represents a fundamental concept in contemporary soil and water engineering. Modern approaches increasingly adopt a systems-based perspective that recognizes the complex interactions among soil properties, hydrological processes, water quality, climate conditions, and land management practices. These interconnections should be more explicitly reflected in the curriculum and supported through dedicated courses and practical applications. The programme could also be strengthened through additional content related to watershed management, hydrology, hydrogeology, geochemistry, geotechnical engineering, water modelling, and climate-resilient resource management. Such additions would further enhance the engineering dimension of the programme and improve its alignment with international developments in the field.

The curriculum structure and ECTS allocation require further review. Each semester should consistently correspond to 30 ECTS credits, and the final dissertation project should be clearly incorporated within the overall ECTS distribution. The dissertation should be designed as an independent research-based project that enables students to demonstrate analytical, experimental, modelling, and engineering design competencies. Although practical training in agricultural and environmental settings constitutes an important strength of the programme, greater emphasis should also be placed on laboratory-based education, research activities, and project-based learning. Students should be provided with opportunities to conduct experimental work, analyse real-world engineering problems, and participate in applied research projects that strengthen their scientific understanding, technical skills, and problem-solving capabilities.

Programme 4 - Master's in Environmental Engineering: The Master's Educational Programme in Environmental Engineering is structured as a two-year programme (four semesters, 120 ECTS) and covers a broad range of topics related to environmental sciences and technologies. The programme lacks a clear specialization and strategic focus, which are essential characteristics of a contemporary master's degree. In its current form, the curriculum encompasses multiple areas of environmental science without establishing a distinct academic profile or advanced thematic direction. As a result, the programme does not sufficiently differentiate itself from undergraduate-level studies nor provide the depth of expertise expected from a postgraduate programme. Furthermore, the inclusion of foreign language courses within the curriculum is not considered appropriate for a master's degree, where the emphasis should be placed on advanced disciplinary knowledge, research competencies, and specialized technical skills. To enhance its relevance and competitiveness, the programme should be redesigned around emerging global challenges and labour market demands. Emphasis should be placed on climate change mitigation, sustainability assessment, and the transition towards a circular and low-carbon economy.

The programme should also place greater emphasis on research-oriented education, project-based learning, and interdisciplinary problem-solving. Master's students should be exposed to real-world environmental challenges through applied research projects, case studies, and collaboration with industry. Furthermore, the master's dissertation should constitute a substantial independent research project demonstrating advanced analytical, scientific, and engineering competencies. The dissertation topics should be closely aligned with the programme's specialization areas and environmental challenges.

Evidences/Indicators

- Component evidences/indicators, including the relevant documents and interview results
- Educational Programs:
- Bachelor's Educational Program in "Agroengineering";
- Bachelor's Educational Program in "Environmental Engineering";
- Bachelor's Educational Program in "Soil and Water Resources Engineering";
- Master's Educational Program in "Environmental Engineering";

Recommendations and Suggestions according to the programmes:	Recommendation(s): Please, write the developed recommendations that apply equally to the educational programmes grouped in the cluster. Also, please indicate, according to individual programs (if any)	Suggestion(s): Please, write the developed suggestions that apply equally to the educational programmes grouped in the cluster. Also, please indicate, according to individual programs (if any)
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General recommendations/ Suggestion of the Cluster		
Programme 1 Bachelor's Educational Program in Agricultural Engineering	Modernize the curriculum by benchmarking it against internationally recognized Agricultural Engineering programmes, strengthening its scientific and engineering foundations, and incorporating areas such as soil and water engineering, precision agriculture, digital technologies, automation, sustainability, and engineering design to better align with labour market needs and international standards. In addition, review the curriculum structure and ECTS allocation to ensure a coherent 30 ECTS workload per semester and establish a research-based final dissertation project that develops analytical, experimental, and engineering design competencies.	
Programme 2 Bachelor's Educational Program in Environmental Engineering	Undertake curriculum revision and benchmarking exercise against internationally recognized Environmental Engineering programmes to strengthen the engineering identity of the degree. In addition, review the curriculum structure and ECTS allocation to ensure a coherent 30 ECTS workload per semester and establish a research-based final dissertation project that develops analytical, experimental, and engineering design competencies.	
Programme 3 Bachelor's Educational Program in Soil and Water Resources Engineering		Further strengthen the programme by enhancing its engineering and systems-oriented perspective, with particular emphasis on the soil-water nexus, watershed management, hydrology, hydrogeology, geochemistry, and climate-resilient resource management.
Programme 4 Master's Educational Program in	Redesign the master's programme to establish a clear academic specialization and strategic focus aligned with emerging global environmental	

Environmental Engineering	challenges and labour market needs. The master's dissertation should be developed as a substantial independent research project closely aligned with the programme's specialization areas.	
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Evaluation

Please, evaluate the compliance of the programme with the component

Component 1.4. Structure and Content of Educational Programme	Evaluation
Programme 1 (name, level)	Partially
Programme 2 (name, level)	Partially
Programme 3 (name, level)	Complies
Programme 4 (name, level)	Partially

1.5. Academic Course/Subject

Accreditation standards indicators

-
- The content of the academic course / subject and the number of credits ensure the achievement of the learning outcomes defined by this course / subject.
 - The content and the learning outcomes of the academic course/subject of the main field of study ensure the achievement of the learning outcomes of the programme.
 - The study materials indicated in the syllabus ensure the achievement of the learning outcomes of the programme.
-

Summary and Analysis of the Compliance of the Educational Programmes Grouped in a Cluster with the Requirements of the Standard Component

Cluster evaluation

Description and Analysis of Cluster

The content of the academic courses and the learning outcomes achieved are generally aligned with Levels 6 and 7 of the National Qualifications Framework, corresponding to the bachelor's and master's degree programmes included within the cluster. The course syllabi are well structured and provide comprehensive information, including teaching staff, course objectives, intended learning outcomes,

ECTS credits, workload analysis, lecture content, teaching methods, and assessment criteria. The documentation is clear, transparent, and adequately developed, with no major shortcomings identified in the syllabus format.

Nevertheless, the content of several courses would benefit from modernization to better reflect current educational developments, technological advancements, and labor market needs. Emphasis should be placed on contemporary engineering approaches, including systems design, modelling, digital technologies, automation, data analytics, and innovation, to better reflect and strengthen the engineering identity of the school and its study programmes.

Furthermore, the allocation of ECTS credits should be reviewed to ensure consistency with the actual student workload, course complexity, level of difficulty, practical requirements, and expected learning outcomes. A more systematic alignment between course content, workload, and ECTS allocation would further strengthen the coherence and quality of the study programmes.

Individual evaluation - An individual evaluation of the doctoral educational program or of the educational program for which a recommendation and/or advice is issued.

Programme 1 - Agricultural Engineering: The study programme and course syllabi have been developed in accordance with the academic regulations and requirements of the university. The syllabi are generally well structured, and the intended learning outcomes of the individual courses are clearly defined and appropriately described. However, the curriculum requires further modernization to better reflect contemporary developments in agricultural engineering and the expectations of a university-level engineering programme. Emphasis should be placed on engineering-oriented courses and subjects that address current technological advances and challenges in the agricultural sector. Furthermore, the allocation of ECTS credits should be reviewed to ensure consistency with the actual workload, course complexity, level of difficulty, and expected learning outcomes. Some courses may require adjustment to achieve a more balanced and coherent curriculum structure.

The study materials and recommended literature should also be updated to incorporate contemporary engineering approaches, modern technologies, international references, and recent scientific developments relevant to agricultural engineering. Such improvements would strengthen the engineering character of the programme and enhance its alignment with international academic standards and labor market requirements.

Programme 2 - Environmental Engineering: The study programme and course syllabi have been developed in accordance with the academic regulations and requirements of the university. The syllabi are generally well structured, and the intended learning outcomes of the individual courses are clearly defined and

appropriately described. However, the curriculum requires substantial modernization to better reflect contemporary developments in environmental engineering. Emphasis should be placed on engineering-oriented courses and subjects that address current technological advances and emerging environmental challenges. In particular, the curriculum should strengthen areas such as environmental systems design, process modelling, water and wastewater engineering, air pollution control engineering, environmental catalysis, sustainability assessment, climate change mitigation, circular economy, and sustainable energy systems.

Furthermore, the allocation of ECTS credits should be reviewed to ensure consistency with the actual student workload, course complexity, level of difficulty, and intended learning outcomes. Some courses may require adjustment to achieve a more balanced, coherent, and engineering-oriented curriculum structure. The study materials and recommended literature should also be updated to incorporate engineering approaches, modern technologies, international references, industrial case studies, and recent scientific developments in environmental engineering.

Programme 3 - Soil and Water Resources Engineering: The study programme and course syllabi have been developed in accordance with the academic regulations and requirements of the university. The syllabi are generally well structured, and the intended learning outcomes of the individual courses are clearly defined and appropriately described. The programme presents a coherent curriculum and demonstrates a satisfactory balance between soil science, water resources management, and engineering applications. Nevertheless, there are opportunities for further enhancement to better reflect recent developments in soil and water engineering. In particular, the curriculum could place greater emphasis on the integrated management of soil and water systems, hydrological processes, watershed management, hydrogeology, geochemistry, climate resilience, and the application of modern engineering tools and technologies.

The allocation of ECTS credits may also benefit from periodic review to ensure consistency with student workload, course complexity, and intended learning outcomes. Minor adjustments in selected courses could further improve the coherence and progression of the curriculum.

Programme 4 - Master's in Environmental Engineering: The study programme and course syllabi have been developed in accordance with the academic regulations and requirements of the university. The intended learning outcomes of the individual courses are clearly defined and appropriately described. The programme provides students with a broad understanding of environmental sciences and technologies, and it is supported by appropriate teaching and assessment methods. Nevertheless, the curriculum would benefit from a clearer thematic focus and a stronger degree of specialization, which are important characteristics of a contemporary master's programme. The programme covers a wide range of environmental topics, without a distinct academic profile or advanced specialization area that differentiates it from undergraduate studies.

To strengthen its identity and relevance, the programme should place greater emphasis on emerging environmental challenges and future-oriented areas of expertise. The curriculum could be further

developed around themes such as climate change mitigation, sustainability assessment, circular economy, and the transition towards a low-carbon society. These areas are increasingly important in both international environmental engineering education and the labor market. The allocation of ECTS credits may also benefit from review to ensure consistency with course complexity, student workload, and the advanced level expected of a master's degree. In addition, study materials and recommended literature should be regularly updated to include recent scientific developments and international practices.

Evidences/Indicators

- Component evidences/indicators, including the relevant documents and interview results
- Educational Programs:
 - Bachelor's Educational Program in "Agroengineering";
 - Bachelor's Educational Program in "Environmental Engineering";
 - Bachelor's Educational Program in "Soil and Water Resources Engineering";
 - Master's Educational Program in "Environmental Engineering";

Recommendations and Suggestions according to the programmes:	<u>Recommendation(s):</u> Please, write the developed recommendations that apply equally to the educational programmes grouped in the cluster. Also, please indicate, according to individual programs (if any)	<u>Suggestion(s):</u> Please, write the developed suggestions that apply equally to the educational programmes grouped in the cluster. Also, please indicate, according to individual programs (if any)
General recommendations/ Suggestion of the Cluster	Undertake a systematic review of course content and ECTS allocation to ensure alignment with contemporary engineering curricula and international educational standards. Strengthen the integration of topics such as systems design, modelling, data analytics, and innovation, and ensure that ECTS credits accurately reflect student workload, course complexity, and intended learning outcomes.	
Programme 1 (name, level)	Update the study materials and recommended literature to incorporate engineering approaches, modern technologies, international references,	

	and recent scientific developments relevant to agricultural engineering.	
Programme 2 (name, level)	Review the allocation of ECTS credits to ensure consistency with actual student workload, course complexity, level of difficulty, and intended learning outcomes. Ensure that each semester corresponds to 30 ECTS credits and making the necessary adjustments to achieve a more balanced, coherent, and engineering-oriented curriculum structure.	
Programme 3 (name, level)		Ensure that ECTS allocation is aligned with international standards.
Programme 4 (name, level)	Specialize the curriculum around strategic thematic areas such as climate change mitigation and adaptation, sustainability assessment, circular economy, and the transition towards a low-carbon society.	

Evaluation

Please, evaluate the compliance of the programme with the component

Component 1.5. Academic Course/Subject	Evaluation
Programme 1 (name, level)	Partially
Programme 2 (name, level)	Partially
Programme 3 (name, level)	Substantially
Programme 4 (name, level)	Partially

2. Methodology and Organisation of Teaching, Adequacy of Evaluation of Programme Mastering

Accreditation standards indicators

Prerequisites for admission to the programme, teaching-learning methods and student assessment consider the specificity of the study field, level requirements, student needs, and ensure the engagement achievement of the objectives and expected learning outcomes of the programme.

2.1 Programme Admission Preconditions

The HEI has relevant, transparent, fair, public and accessible programme admission preconditions and procedures that ensure the engagement of individuals with relevant knowledge and skills in the programme to achieve learning outcomes.

PHD Programme indicators

- The admission requirements of the doctoral programme are public, they include information on the programme, admission deadlines and documentation to be submitted, as well as information on the research interests of supervisors and support/encouragement mechanisms for studies conducted by doctoral students and other information;
- Admission requirements of the doctoral programme takes into consideration an assessment of the applicants' experience and capabilities, required for successful completion of the doctoral programme.
- When enrolling in the doctoral education programme, the strategy of the scientific research/creative research activity of the HEI/basic educational unit is also taken into account;
- Admission of doctoral students to the doctoral educational programme is ensured on a commission basis;
- The HEI defines the rules for determining the composition, activities, and decision-making of the committee involved in the admission process of the doctoral education programme, which ensures the evaluation of the people wishing to be enrolled in the programme - in compliance with the principles of objectivity, fairness, and transparency;
- A candidate wishing to enroll in a doctoral educational programme shall submit a research/creative research thesis/project to the Commission in accordance with the rules established by the HEI. A candidate is also required to have a previous paper/publication in the relevant field and/or to participate in scientific-research projects and events and/or to have at least 2 years of work experience in the relevant field. The established requirements should provide an opportunity to evaluate the candidate's research skills;
- At the time of admission to the doctoral educational programme, the level of foreign language proficiency is determined. Taking into account the specifics of the field, the person in the programme must have knowledge of the English language at least B2 level or knowledge of one of the other Western European foreign languages at least B2 level and English language knowledge at least B1 level;
- Admission to the doctoral education programme takes into account the human, financial, and research resources available at the HEI, including the ratio of doctoral supervisors to doctoral students. Also, the results of the analysis on the timely completion of the programme by the doctoral students enrolled will be taken into account by the HEI.

Summary and Analysis of the Compliance of the Educational Programmes Grouped in a Cluster with the Requirements of the Standard Component

Admission to the bachelor's educational programmes - Agricultural Engineering, Environmental Engineering, Soil and Water Resources Engineering and master's Environmental Engineering programme are carried out according to the rules established by legislation. In particular, the right to study is granted to the holder of a state document confirming complete general education or a person equivalent to it who has gained the right to study at the Sokhumi State University in accordance with the Law of Georgia "On

Higher Education” and the Regulation on the Conduct of Unified National Exams approved by the order of the minister of education and science No 19/5 of February 18, 2011.

In order to support applicants and promote the mobility of students, studying on the program without passing the Unified National Exams is permitted in accordance with the rules and within the established dates stated by the Ministry of education and science of Georgia:

- a) For foreign citizens and stateless persons who have received complete general education or its equivalent in a foreign country;
- b) For citizens of Georgia who have received complete general education or its equivalent in a foreign country and have received the last two years of general education in a foreign country;
- c) For foreign citizens who are / were studying and have gained credits / qualification in a foreign country at a higher educational institution established in accordance with the legislation of that country;
- d) For citizens of Georgia who, in accordance with the dates established by the ministry of education and science of Georgia, live / lived, are / were studying and have gained credits / qualification in a foreign country at a higher educational institution established in accordance with the legislation of that country.

Admission to the educational programmes is also permitted by mobility, in accordance with the Rules for Transferring from a Higher Educational Institution to Another Higher Educational Institute approved by the Order of the minister of education and science of Georgia No 10/n of February 4th, 2010. When enrolling in educational programmes, the current version of the legislation will be taken into account.

The programs included in the cluster comply with the requirements of the sub-standard 2.1 - Programme Admission Preconditions

Cluster evaluation

Description and Analysis of Cluster

Describe, analyse and evaluate the compliance of the educational programmes grouped in the cluster with the requirements of the component of the standard, based on the information collected through the self-evaluation report (SER), the enclosed documents and site-visit.

Individual evaluation - An individual evaluation of the doctoral educational program or of the educational program for which a recommendation and/or advice is issued.

Description and Analysis - Programme 1 (Agricultural engineering B.S))

Describe, analyse and evaluate the compliance of the doctoral level educational programme, or the educational program for which a recommendation and/or **suggestion** is issued, with the requirements of the component of the standard, based on the information collected through the self-evaluation report (SER), the enclosed documents and site-visit.

Admission to the Bachelor's educational programme in Agricultural Engineering is conducted in accordance with the legislation of Georgia. Applicants are admitted based on the requirements established by the Law of Georgia on Higher Education and the relevant regulations governing the Unified National Examinations.

In accordance with the procedures established by the Ministry of Education and Science of Georgia, certain categories of applicants, including eligible foreign citizens and Georgian citizens educated abroad, may be admitted without passing the Unified National Examinations. Admission is also possible through student mobility in compliance with the applicable national regulations. All admissions are carried out in accordance with the current legislation of Georgia

The Bachelor's educational programme in Agricultural Engineering comply with the requirements of the sub-standard 2.1 - Programme Admission Preconditions

Description and Analysis - Programme 2 (Environmental Engineering – B.S)

Admission to the Bachelor's educational programme in **Environmental Engineering** is conducted in accordance with the legislation of Georgia. Applicants are admitted based on the requirements established by the Law of Georgia on Higher Education and the relevant regulations governing the Unified National Examinations.

In accordance with the procedures established by the Ministry of Education and Science of Georgia, certain categories of applicants, including eligible foreign citizens and Georgian citizens educated abroad, may be admitted without passing the Unified National Examinations. Admission is also possible through student mobility in compliance with the applicable national regulations. All admissions are carried out in accordance with the current legislation of Georgia

The Bachelor's educational programme in Environmental Engineering comply with the requirements of the sub-standard 2.1 - Programme Admission Preconditions

Description and Analysis - Programme 3 (Soil and Water Resources Engineering B.S)

Admission to the Bachelor's educational programme in Soil and Water Resources Engineering B.S is conducted in accordance with the legislation of Georgia. Applicants are admitted based on the requirements established by the Law of Georgia on Higher Education and the relevant regulations governing the Unified National Examinations.

In accordance with the procedures established by the Ministry of Education and Science of Georgia, certain categories of applicants, including eligible foreign citizens and Georgian citizens educated abroad, may be admitted without passing the Unified National Examinations. Admission is also possible through student mobility in compliance with the applicable national regulations. All admissions are carried out in accordance with the current legislation of Georgia

The Bachelor's educational programme in Environmental Engineering comply with the requirements of the sub-standard 2.1 - Programme Admission Preconditions

Description and Analysis - Programme 4 (Environmental Engineering M.S)

Admission to the Bachelor's educational programme in Soil and Water Resources Engineering is conducted in accordance with the legislation of Georgia. Applicants are admitted based on the requirements established by the Law of Georgia on Higher Education and the relevant regulations governing the Unified National Examinations.

In accordance with the procedures established by the Ministry of Education and Science of Georgia, certain categories of applicants, including eligible foreign citizens and Georgian citizens educated abroad, may be admitted without passing the Unified National Examinations. Admission is also possible through student mobility in compliance with the applicable national regulations. All admissions are carried out in accordance with the current legislation of Georgia

The Master's educational programme in Environmental Engineering comply with the requirements of the sub-standard 2.1 - Programme Admission Preconditions

Evidences/Indicators

Evidence / Indicators

- Educational programs:
 - Bachelor's Educational Program in "Agricultural engineering";
 - Bachelor's Educational Program in "Environmental Engineering";
 - Bachelor's Educational Program in "Soil and Water Resources Engineering";
 - Master's Educational Program in "Environmental Engineering".

Recommendations and Suggestions according to the programmes:	Recommendation(s): Please, write the developed recommendations that apply equally to the educational programmes	Suggestion(s): Please, write the developed suggestions that apply equally to the educational programmes grouped
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	grouped in the cluster. Also, please indicate, according to individual programs (if any)	in the cluster. Also, please indicate, according to individual programs (if any)
General recommendations/ Suggestion of the Cluster		
Programme 1 (name, level)		
Programme 2 (name, level)		
Programme 3 (name, level)		
Programme 4 (name, level)		

Evaluation

Please, evaluate the compliance of the programme with the component

Component <u>2.1 Programme Admission</u> <u>Preconditions</u>	Evaluation
Programme 1 (name, level)	Complies
Programme 2 (name, level)	Complies
Programme 3 (name, level)	Complies
Programme 4 (name, level)	Complies

2.2. The Development of Practical, Scientific/Research/Creative/Performing and Transferable Skills

Accreditation standards indicators

Programme ensures the development of students' practical, scientific/research/creative/performing and transferable skills and/or their involvement in research projects, in accordance with the programme learning outcomes.

Summary and Analysis of the Compliance of the Educational Programmes Grouped in a Cluster with the Requirements of the Standard Component

Cluster evaluation

Description and Analysis of Cluster

The Bachelor's and Master's educational programs include a practical component. The practice supervisor oversees the implementation of this component and ensures that it is conducted appropriately. The host institution designates a mentor to supervise students during their placement. Throughout the practice period, the student adheres to the host institution's internal regulations, safety requirements, and ethical standards, carries out assigned tasks, and keeps a practice diary in accordance with the practice schedule and the mentor's guidance.

In accordance with the educational level, program structure, and intended learning outcomes, students are offered opportunities to develop practical competencies and/or engage in scientific research projects. Their research activities are supervised by academic or invited staff members. Students also have opportunities to participate in university, national, and international scientific conferences.

During the interview, expert group noted that opportunities for student engagement in scientific conferences and research projects needs to be improved.

Individual evaluation - An individual evaluation of the doctoral educational program or of the educational program for which a recommendation and/or advice is issued.

Description and Analysis - Programme 2

Bachelor educational program - Environmental Engineering”

Description and Analysis - Programme 3

Bachelor educational program - Soil and Water Resources Engineering

Description and Analysis - Programme 4

Master’s Educational Program in “Environmental Engineering”

Evidences/Indicators

- Component evidences/indicators, including the relevant documents and interview results

- *Educational programs and syllabi:*
 1. *Bachelor's Educational Program in "Agroengineering";*
 2. *Bachelor's Educational Program in "Environmental Engineering";*
 3. *Bachelor's Educational Program in "Soil and Water Resources Engineering";*
 4. *Master's Educational Program in "Environmental Engineering";*
- *Sokhumi State University website;*
- *Practice agreements/memoranda;*
- *Student conferences conducted at the university;*
- *Practice reports.*
- *Interviews with the program's evaluation staff and students*

Recommendations and Suggestions according to the programmes:	<u>Recommendation(s):</u> Please, write the developed recommendations that apply equally to the educational programmes grouped in the cluster. Also, please indicate, according to individual programs (if any)	<u>Suggestion(s):</u> Please, write the developed suggestions that apply equally to the educational programmes grouped in the cluster. Also, please indicate, according to individual programs (if any)
General recommendations/ Suggestion of the Cluster	Strengthen the active involvement of students in scientific conferences, research projects, and other activities to strengthen their academic engagement, research competencies, and professional development.	
Programme 1 (name, level)		
Programme 2 (name, level)		
Programme 3 (name, level)		
Programme 4 (name, level)		

Evaluation

Please, evaluate the compliance of the programmes with the component

Component	Evaluation
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<u>2.2. The Development of Practical, Scientific/Research/Creative/Performing and Transferable Skills</u>	
Programme 1 (name, level)	Substantially
Programme 2 (name, level)	Substantially
Programme 3 (name, level)	Substantially
Programme 4 (name, level)	Substantially

2.3. Teaching and Learning Methods

Accreditation standards indicators

The programme is implemented by using student-centered teaching and learning methods. Teaching and learning methods correspond to the level of education, course/subject content, learning outcomes and ensure their achievement.

Summary and Analysis of the Compliance of the Educational Programmes Grouped in a Cluster with the Requirements of the Standard Component

Cluster evaluation

Description and Analysis of Cluster

Describe, analyse and evaluate the compliance of the educational programmes grouped in the cluster with the requirements of the component of the standard, based on the information collected through the self-evaluation report (SER), the enclosed documents and site-visit.

Individual evaluation - An individual evaluation of the doctoral educational program or of the educational program for which a recommendation and/or advice is issued.

Description and Analysis - Programme 1

Bachelor educational program - Agricultural Engineering

The program employs a diverse range of teaching and learning activities tailored to the specific objectives and content of each study course. The methods used are specified in the respective course syllabi and are selected to support the achievement of the intended learning outcomes. These include discussions and debates, cooperative and collaborative group work, case studies, brainstorming sessions, role-playing and simulation exercises, demonstrations, practical and laboratory work, inductive and deductive approaches, analysis and synthesis, oral and written assignments, explanatory methods, experiential learning, project development and presentations, problem-based learning (PBL), and heuristic methods.

Description and Analysis - Programme 2

Bachelor educational program - Environmental Engineering”

The program incorporates a variety of teaching and learning activities, selected according to the objectives and specific characteristics of each study course. These activities are specified in the relevant course syllabi and are intended to facilitate the achievement of the planned learning outcomes. They include discussions and debates, cooperative and collaborative learning, case studies, brainstorming, role-playing and simulation exercises, demonstrations, practical and laboratory work, inductive and deductive approaches, analytical and synthetic methods, oral and written assignments, explanatory methods, action-oriented learning, project development and presentations, problem-based learning (PBL), and e-learning.

Description and Analysis - Programme 3

Bachelor educational program - Soil and Water Resources Engineering

The program applies a wide range of teaching and learning activities, selected in accordance with the objectives and specific characteristics of each study course. The methods used are outlined in the respective course syllabi and are designed to support the achievement of the intended learning outcomes. These include discussions and debates, cooperative and collaborative learning, demonstrations, analytical and synthetic approaches, laboratory and practical work, oral communication and written assignments, explanatory methods, project development and presentations, industrial and educational practice, brainstorming, inductive and deductive reasoning, problem-based learning (PBL), and case studies.

Description and Analysis - Programme 4

Master’s Educational Program in “Environmental Engineering”

The program employs a variety of teaching and learning activities tailored to the objectives and specific characteristics of each study course. These activities are specified in the relevant course syllabi and support the achievement of the intended learning outcomes. They include discussions and debates, brainstorming, demonstrations, analytical methods, oral communication, written assignments, practical and laboratory work, explanatory methods, problem-based learning (PBL), and project development and presentations.

Evidences/Indicators

- Educational programs and syllabi:
 1. Bachelor’s Educational Program in “Agroengineering”;
 2. Bachelor’s Educational Program in “Environmental Engineering”;

3. Bachelor's Educational Program in "Soil and Water Resources Engineering";
 4. Master's Educational Program in "Environmental Engineering";
- Regulation governing the educational process.
 - Interviews with the assessment groups.

Recommendations and Suggestions according to the programmes:	Recommendation(s): Please, write the developed recommendations that apply equally to the educational programmes grouped in the cluster. Also, please indicate, according to individual programs (if any)	Suggestion(s): Please, write the developed suggestions that apply equally to the educational programmes grouped in the cluster. Also, please indicate, according to individual programs (if any)
General recommendations/ Suggestion of the Cluster		
Programme 1 (name, level)		
Programme 2 (name, level)		
Programme 3 (name, level)		
Programme 4 (name, level)		

Evaluation

Please, evaluate the compliance of the programmes with the component

Component 2.3. Teaching and Learning Methods	Evaluation
Programme 1 (name, level)	Complies
Programme 2 (name, level)	Complies
Programme 3 (name, level)	Complies
Programme 4 (name, level)	Complies

2.4. Student Evaluation

Accreditation standards indicators

Student evaluation is conducted in accordance with the established procedures. It is transparent, reliable and complies with existing legislation.

PHD Programme indicators

- Doctoral students are evaluated according to the procedures established in the HEI, that are transparent, reliable and comply with the current legislation;
- The teaching component of the doctoral programme curriculum is assessed with the methods appropriate to the content of the teaching component and the requirements of the doctoral degree, which provides assessment of the student's knowledge and skills, including analytical and critical thinking, selection and independent application of research methodology, substantiated expression of an opinion, and other skills;
- The doctoral education programme provides the requirements for admission of a doctoral student to the defense of a dissertation/creative/performing work, or other research project/paper. This envisages periodic formative assessments of the student's progress;
- Before submitting the dissertation/creative/performance work for the academic degree, the doctoral student is required to publish at least two scientific articles from the relevant research field, one of which must be published in a peer-reviewed journal with a foreign international index.
- The supervisor periodically monitors the progress of consistent performance of a research component by the doctoral student, provides formative assessment, and feedback.
- Requirements of the academic style of the doctoral thesis, methods and criteria for evaluating the doctoral thesis, which take into account the specifics of the field, are known in advance to the doctoral students and are taken into account during the evaluation of the doctoral theses.
- While evaluating the scientific-research component, HEI uses the mechanisms of academic and research ethics, academic integrity, plagiarism prevention, detection and response mechanisms;
- The defense of doctoral theses is performed in accordance with the HEI procedures of evaluation and defense of a doctoral thesis which is in compliance of the current legislation.
- The evaluation of the doctoral thesis is carried out in a commission manner - by the commission/commissions;
- The procedures for the evaluation and/or defense of the doctoral thesis provide for the conclusions of the competent institution (local and/or foreign university, scientific-research institute), local and international reviewer (the conclusion of the international reviewer is not mandatory for the following fields of study: Georgian philology, Abkhazian philology, also, if the doctoral candidate has an international supervisor), who evaluates the novelty of the scientific research/creative work of the dissertation and readiness for the defense of the dissertation;
- A local reviewer is a staff member of a local university, scientific-research institute/center, or a person with emeritus status, who is equipped with the latest knowledge in the field, has actively participated in scientific research, and has published at least 1 scientific work (in artistic directions - creative/performance project) in a peer-reviewed journal with a foreign international index within the last 3 years. This work corresponds to the general topic/field of research of the doctoral student's doctoral work;
- An international reviewer is a staff member of a foreign university, scientific-research institute/center, or a person with emeritus status, who is equipped with the latest knowledge in the field, has actively participated in scientific research, and has published at least 1 scientific work (in artistic directions -

creative/performance project) in a peer-reviewed journal with a foreign international index within the last 3 years. This work corresponds to the general topic/field of research of the doctoral student's doctoral work;

- Mechanisms and processes for the selection and appointment of doctoral thesis reviewers by the university should be transparent, impartial, and objective. When selecting reviewers, their anonymity¹ should be ensured, which contributes to the preparation of an unbiased, fair and objective conclusion;
- The defense commission(s) consists of representatives of academic/scientific staff from the relevant field, whose competence allows for in-depth and thorough evaluation of the paper and the originality of the research/creative research and its results;
- Participation of external evaluators is ensured in the composition of the defense commission(s); The supervisor/co-supervisor of the doctoral student does not participate in the work of the defense commission(s);
- Considering the specifics of the field, the defense commission(s) includes (if necessary) an international evaluator(s) with relevant qualification and competence, and a representative(s) of the governmental/non-governmental sector and the labor market;
- Defense of doctoral thesis is public and open; The abstract/summary of the doctoral thesis in Georgian, English and the languages of the programme implementation is public and available to everyone;
- The doctoral educational programme provides the appeal of evaluation results of the doctoral students' enrollment to the programme as well as procedures of dissertation defense. The rules of appeal are publicly available in advance and ensure that an objective and fair decision is made;
- Mechanisms for searching, and appointing reviewer and determining his/her activities are ensured by HEI;
- Information about the topics of current theses and defended theses are published by the HEI on a unified electronic portal.

Summary and Analysis of the Compliance of the Educational Programmes Grouped in a Cluster with the Requirements of the Standard Component

Cluster evaluation

Description and Analysis of Cluster

Describe, analyse and evaluate the compliance of the educational programmes grouped in the cluster with the requirements of the component of the standard, based on the information collected through the self-evaluation report (SER), the enclosed documents and site-visit.

The student assessment is conducted in accordance with the established institutional procedures. Based on the interviews with students, the grading system and assessment criteria appear to be well organized. Students reported that they are adequately informed about the academic process, and that lecturers introduce the course syllabus and assessment methods during the first lecture of each course. The students perceived the assessment process as fair, objective, and transparent.

The interviews further indicated that the assessment methods employed within the programmes are generally aligned with the intended learning outcomes and academic objectives. Students receive timely

information regarding their academic performance and progress, which contributes positively to the learning process and enables them to monitor their achievement of the expected learning outcomes.

The university has established a formal assessment appeal mechanism, and students are aware of its existence and procedures. The appeal process was described by students as accessible, transparent, and effective.

Nevertheless, the expert panel identified a need to further strengthen students' awareness of academic integrity and plagiarism prevention mechanisms. Although institutional procedures are in place, students demonstrated limited familiarity with plagiarism policies, detection procedures, and the principles of responsible academic conduct. Additional efforts are therefore required to enhance the promotion and implementation of academic ethics across study programmes.

Individual evaluation - An individual evaluation of the doctoral educational program or of the educational program for which a recommendation and/or advice is issued.

Description and Analysis - Programme 1 (Name and Level)

Describe, analyse and evaluate the compliance of the doctoral level educational programme, or the educational program for which a recommendation and/or **suggestion** is issued, with the requirements of the component of the standard, based on the information collected through the self-evaluation report (SER), the enclosed documents and site-visit.

Evidences/Indicators

- Component evidences/indicators, including the relevant documents and interview results
- Self-evaluation report;
- Interview with students;
- Interview with academic personnel;
- Educational program syllabi;

Recommendations and Suggestions according to the programmes:	Recommendation(s): Please, write the developed recommendations that apply equally to the educational programmes grouped in the cluster. Also, please indicate, according to individual programs (if any)	Suggestion(s): Please, write the developed suggestions that apply equally to the educational programmes grouped in the cluster. Also, please indicate, according to individual programs (if any)
General recommendations/ Suggestion of the Cluster		Establish and systematically communicate plagiarism prevention mechanisms, procedures, and the principles of academic ethics through

		regular information and training activities for students and academic staff.
Programme 1 (name, level)		
Programme 2 (name, level)		
Programme 3 (name, level)		
Programme 4 (name, level)		

Evaluation

Please, evaluate the compliance of the programmes with the component

Component <u>2.4. Student Evaluation</u>	Evaluation
Programme 1 (Bachelor's Educational Programme in Agricultural Engineering)	Complies
Programme 2 (Bachelor's educational programme in Environmental ineering)	Complies
Programme 3 (Bachelor's educationall programme in Soil and Water Resources ineering)	Complies
Programme 4 (Master's Educational Programme in Environmental Engineering)	Complies

3. Student Achievements, Individual Work with Them

The programme ensures the creation of a student-centered environment by providing students with relevant services; promotes maximum student awareness, implements a variety of activities and facilitates student engagement in local and / or international projects; proper quality of scientific guidance and supervision is provided for master's and doctoral students.

3.1 Student Consulting and Support Services

Accreditation standards indicators

Students receive consultation and support regarding planning of the learning process, improvement of academic achievement, and career development from the people involved in the programme and/or structural units of the HEI. A student has an opportunity to have a diverse learning process and receive relevant information and recommendations from those involved in the programme.

PHD Programme indicators

- Taking into account the specifics of the field, within the framework of the doctoral programme, the HEI cooperates with local and international scientific research institutes/centers/HEIs, doctoral schools, public and private sector/industry and other potential employers to implement a scientific-research component, to integrate graduates into the labour market and promote their career advancement;
- The higher education institution creates appropriate conditions and environment for the doctoral educational programme to encourage international mobility and/or participation in international conferences, seminars and other scientific/creative activities, which aims to develop a strong and inclusive research environment and promotes the formation of best research practices, internationalization of the research, and implementation of joint research projects.
- HEI provides doctoral students with additional support mechanisms in the form of extra-curricular events and activities aimed at the doctoral student's personal, professional and career development;
- Within the framework of the doctoral educational programme, the higher education institution has developed supporting measures for doctoral students, which allows the doctoral student to complete the doctoral thesis within the timeframe established by the law;
- HEI provides indicative information to the doctoral student about scientific publications/databases with an international index corresponding to the specificity of the field for the publication of an international scientific publication; in the artistic field it provides information about artistic and creative events (concert, festival, competition, master class, exhibition, biennial and others);
- HEI periodically analyzes the indicators of career development of the graduates of the doctoral educational programme, the results of which are aimed at the development of the programme, resources and supporting mechanisms for doctoral students;
- HEI provides doctoral students with information about support services.

Summary and Analysis of the Compliance of the Educational Programmes Grouped in a Cluster with the Requirements of the Standard Component

Cluster evaluation

Description and Analysis of Cluster

Describe, analyse and evaluate the compliance of the educational programmes grouped in the cluster with the requirements of the component of the standard, based on the information collected through the self-evaluation report (SER), the enclosed documents and site-visit.

The programmes provide a range of student consulting and support services that facilitate communication, academic guidance, and access to information. Based on the interviews, information related to the study process is communicated effectively through institutional email and other official channels. Students reported that academic staff are approachable and responsive, and that communication with lecturers is generally easy and effective.

In terms of academic support, students primarily seek assistance from programme coordinators, the Dean, and the Deputy Dean. Their involvement and responsiveness were evaluated positively by students, who indicated that academic and administrative issues are usually addressed within a reasonable timeframe. Students also expressed overall satisfaction with the library resources and the availability of study materials.

However, the expert panel identified several areas requiring further improvement. Both students and academic staff reported shortcomings related to laboratory infrastructure and equipment, including an insufficient number of microscopes and limited availability of laboratory materials and chemical reagents. These limitations restrict opportunities for individual practical work and reduce the effectiveness of laboratory-based teaching and experiential learning. As practical and laboratory training constitutes a fundamental component of engineering education, particularly during the early stages of study, additional investment in laboratory facilities and equipment is necessary to support the achievement of programme learning outcomes and the development of practical competencies.

Students also indicated that greater flexibility in class scheduling would be beneficial and could improve the overall learning experience.

Regarding internationalisation, students are informed about international mobility and exchange opportunities. Nevertheless, participation rates remain low. During the interviews, students indicated that limited perceived value of international experience and insufficient foreign language competencies constitute the main barriers to participation in mobility programmes.

Individual evaluation - An individual evaluation of the doctoral educational program or of the educational program for which a recommendation and/or advice is issued.

Description and Analysis - Programme 1 (Name and Level)

Describe, analyse and evaluate the compliance of the doctoral level educational programme, or the educational program for which a recommendation and/or **suggestion** is issued, with the requirements of the component of the standard, based on the information collected through the self-evaluation report (SER), the enclosed documents and site-visit.

Evidences/Indicators

- Component evidences/indicators, including the relevant documents and interview results
- **Interview**
- **Interview with students alumni**
- **SER;**

Recommendations and Suggestions according to the programmes:	<u>Recommendation(s):</u> Please, write the developed recommendations that apply equally to the educational programmes grouped in the cluster. Also, please indicate, according to individual programs (if any)	<u>Suggestion(s):</u> Please, write the developed suggestions that apply equally to the educational programmes grouped in the cluster. Also, please indicate, according to individual programs (if any)
General recommendations/ Suggestion of the Cluster	Strengthen student consulting and support services by upgrading laboratory infrastructure and equipment, enhancing opportunities for practical and laboratory-based learning, and promoting international mobility through increased awareness activities and targeted support for the development of foreign language competencies.	
Programme 1 (name, level)		
Programme 2 (name, level)		
Programme 3 (name, level)		
Programme 4 (name, level)		

Evaluation

Please, evaluate the compliance of the programmes with the component

Component 3.1 Student Consulting and Support Services	Evaluation
Programme 1 (Bachelor's educational	Substantially
Programme 2 (Bachelor's educational programme in Environmental Engineering	Substantially
Programme 3 (Bachelor's educational programme in and Water Resources Engineering	Substantially
Programme 4 (Master's Educational Programme in Environmental Engineering)	Substantially

3.2. Master's and Doctoral Student Supervision

Accreditation standards indicators

- A scientific supervisor provides proper support to master's and doctorate students to perform the scientific-research component successfully.
- Within master's and doctoral programmes, ratio of students and supervisors enables to perform scientific supervision properly.

PHD Programme indicators

- The supervisor coordinates the performance of the scientific-research component of the doctoral student;
- The HEI has developed the documents regulating the appointment and change of supervisor/co-supervisor of the doctoral student and implementation of supervision/co-supervision;
- The HEI has developed a sample of agreement/contract to be signed between the doctoral student, his/her supervisor/co-supervisor and the HEI, which defines the rights and responsibilities of all parties; The supervision of the doctoral student is included in the overall university workload of the relevant academic/scientific staff;

- The terms of the agreement/contract facilitate the effective implementation of the activities by the supervisor/co-supervisor and the completion of the thesis by the doctoral student within the timeframes;
- During the research process the supervisor has regular consultations with doctoral students on methodological, structural, conceptual and other issues related to the research/creative research. The frequency of the consultations corresponds to the specifics of the research topic and the individual needs of the doctoral student. A supervisor provides consultations over the following topics during the research: research design and project management, research methodology, professional development, the process of writing a thesis/scientific-research work/dissertation, integration process within the local and international scientific/creative network, the processes of participation in local and international scientific/creative events and presentation of the results; publication of scientific articles in peer-reviewed journals, etc.;
- Co-supervisor (if any) supports the doctoral student in the implementation of the scientific-research component through the mutual agreement with the supervisor and the doctoral student;
- Taking into account the specifics and needs of the research, the university promotes the involvement of the staff of a foreign university, scientific-research institute/center, or a person with emeritus status including a compatriot person living abroad, as a supervisor/co-supervisor in the research/creative research process of the doctoral candidate;
- To ensure the doctoral programme sustainability, the HEI, when planning the number of the doctoral thesis supervisors, considers the workload of the supervisors, the amount of existing and future doctoral students, specifics of the programme and best international practices;
- HEI has developed a methodology for the ratio of the doctoral thesis supervisors to doctoral students in the doctoral educational programme, thus ensuring the effective implementation of the supervision;
- The ratio determined by the HEI between the supervisor and his/her active doctoral students does not exceed - 1:3, within the framework of one higher education institution; A ratio of 1:5 between the supervisor and his doctoral students with active status is allowed if a suspended doctoral student requires reinstatement of status to submit a thesis/creative/performance work to be awarded an academic degree. The mentioned ratio can be determined differently depending on the conditions of the scientific grant/project;
- The HEI has developed mechanisms for evaluating the activities of the supervisor/co-supervisor of the doctoral thesis, which ensures the effective implementation of the supervision/co-supervision;

Summary and Analysis of the Compliance of the Educational Programmes Grouped in a Cluster with the Requirements of the Standard Component

Cluster evaluation

Description and Analysis of Cluster

Describe, analyse and evaluate the compliance of the educational programmes grouped in the cluster with the requirements of the component of the standard, based on the information collected through the self-evaluation report (SER), the enclosed documents and site-visit.

Individual evaluation - An individual evaluation of the doctoral educational program or of the educational program for which a recommendation and/or advice is issued.

Description and Analysis - Programme 4 (Environmental Engineering, MA program)

The role of supervisors is crucial for the successful completion of master's theses. The university has established formal procedures for appointing supervisors, who must possess appropriate academic qualifications and research experience relevant to the thesis topic. Supervisors may be professors, associate professors, assistant professors, or invited professors, and students may also be assigned a co-supervisor to support interdisciplinary research.

Supervisors are expected to maintain regular communication with students and provide continuous guidance through individual research plans that define research objectives, milestones, and expected outcomes. The university has established transparent thesis assessment criteria based on a 100-point grading system, and supervisors are not involved in the formal evaluation process, which contributes to impartiality. However, the expert panel observed substantial similarities among several thesis review reports, raising concerns regarding the individualization and rigor of the review process.

The university has also implemented regulations and procedures concerning academic integrity and plagiarism prevention, including mandatory plagiarism checks prior to thesis defence and access to plagiarism detection software. Nevertheless, the review of master's theses revealed shortcomings in academic writing and referencing practices, as citation standards were not consistently applied and, in several cases, references included direct web links instead of properly formatted bibliographic citations.

Data related to the supervision of master's/doctoral students Programme 1 (name, level)⁸	
Number of master's/doctoral theses supervisors	5
//Number of doctoral thesis supervisors	-
Number of master's students	5
//Number of doctoral students	-

⁸ In case of necessity please add the appropriate number of tables for the educational programmes grouped in a cluster.

Ratio - supervisors of master's theses/master's students	4:1.00
Ratio - supervisors of doctoral theses/doctoral students	-

Evidences/Indicators

- Component evidences/indicators, including the relevant documents and interview results
- Evaluation of master's thesis
- **SER**
- **Interview with students ;**
- **Interview with academic personnel;**

Recommendations and Suggestions according to the programmes:	<u>Recommendation(s):</u> Please, write the developed recommendations that apply equally to the educational programmes grouped in the cluster. Also, please indicate, according to individual programs (if any)	<u>Suggestion(s):</u> Please, write the developed suggestions that apply equally to the educational programmes grouped in the cluster. Also, please indicate, according to individual programs (if any)
General recommendations/ Suggestion of the Cluster		
Programme 1 (name, level)		
Programme 2 (name, level)		
Programme 3 (name, level)		
Programme 4 (name, level)	Provide clear, detailed, and individualised reviews to students that demonstrate their progress and achievements and offer constructive guidance for their further academic and research development.	

Evaluation

Please, evaluate the compliance of the programmes with the component

Component 3.2. Master's and Doctoral Student Supervision	Evaluation
Programme 1 (name, level)	- Select Appropriate
Programme 2 (name, level)	-
Programme 3 (name, level)	-
Programme 4 (Environmental Engineering)	Substantially

4. Providing Teaching Resources

Accreditation standards indicators

Human, material, information and financial resources of educational programme/educational programmes grouped in a cluster ensure the sustainable, stable, efficient and effective functioning of the programme and the achievement of the defined objectives.

4.1 Human Resources

- Programme staff consists of qualified persons who have necessary competences in order to help students to achieve the programme learning outcomes.
- The number and workload of programme academic/scientific and invited staff ensures the sustainable running of the educational process and also, proper execution of their research/creative/performance activities and other assigned duties. Quantitative indicators related to academic/scientific/invited staff ensure programme sustainability.
- The Head of the Programme possesses necessary knowledge and experience required for programme elaboration, and also the appropriate competences in the field of study of the programme. He/she is personally involved in programme implementation.
- Programme students are provided with an adequate number of administrative and support staff with relevant competence.

PHD Programme indicators

- The doctoral education programme involves at least 5 affiliated academic staff of the relevant field, including at least 3 professors/associate professors. If available, the institution should involve scientific staff in the programme implementation;

- The qualification of the academic/research staff of the doctoral educational programme is confirmed by a scientific paper published in the peer-reviewed journals with the international index during the last 3 years and/or a practical/creative/performing project, which confirms his/her competence in the relevant field;
- HEI promotes the participation of foreign university, scientific-research institute/center staff, or a person with emeritus status in the process of implementing the doctoral educational programme;
- The Head of the doctoral programme has the necessary knowledge and experience for the design and development of the programme, as well as the appropriate competence in the field of study of the programme. He/she is directly involved in the implementation of the programme and is the affiliated academic and/or scientific staff of the institution;

Cluster evaluation

Description and Analysis of Cluster

The educational programmes are implemented by Sokhumi State University in cooperation with relevant structural units. The development and delivery of the clusters are supported by qualified administrative and support personnel at the faculty of Natural Sciences, Mathematics, Technologies and Pharmacy.

The programmes in this cluster are led by experienced programme heads. The experts recognise the professional knowledge, academic qualifications, practical experience, as well as theoretical and practical competencies that are essential for the delivery of programme management. The experts, however, would like to point out several issues regarding the lack of coordination between the faculty management, programme heads, academic staff coming both from Technical, as well as Sokhumi State Universities, as well as the students.

The experts' visit to the university, as well as the SER and review of the documents demonstrated the academic staff's involvement in programme planning, continuous development, and the quality enhancement process. The academic staff is further involved in the evaluation of the programmes, as well as the individual courses delivered within each programme.

The programme is aligned with the institutional priorities of Sokhumi State University and responds to the current labour market demands for agricultural, environmental, soil, and water engineers in Georgia. At the same time, the respondents during the visit acknowledged the fact that even though, thematically, the programmes are in line with the market demands, the general level of interest among the students remain limited.

The university presented evidence of open and transparent competition procedures for the selection of academic staff. The team of experts acknowledges the procedures' compliance with the law of Georgia on Higher Education, as well as statutory documents of the university itself. The experts also acknowledge that the qualifications of academic and invites staff meet the requirements.

The number of academic, as well as invited personnel involved in the cluster delivery is appropriate and adequate to its scope, individual programme objectives, study outcomes, and student enrolment. Staff resources are sufficient to support both the educational process, as well as research activities associated with the clusters in the programme. The competencies of the personnel involved in the delivery of the programmes within the cluster are evidenced by their scholarly achievements. They regularly lead and contribute to the production of textbooks, scientific publications in refereed and peer-review journals, monographs, as well as participation in international, national, as well as university-level scientific conferences and events. Furthermore, the university is participating in a number of international and national research and applied projects. Having said that, to ensure the long-term sustainability, resilience, and smooth operation of the study programme, it is recommended to strengthen the academic staff capacity, thereby reducing institutional vulnerability to unexpected staff absence, as well as the sustainability of the programme itself.

The workload of academic staff is high. According to the documentation provided, some faculty members are responsible for teaching 10-12 courses, which may adversely affect teaching quality, research productivity, and overall academic performance. The Sokhumi State University should ensure a more balanced and rational distribution of teaching responsibilities while simultaneously preparing new academic staff to participate in the teaching process and strengthen institutional capacity. The HEI presented evidence that the programmes operate under a semester-based renewable workload allocation system. The workload is assigned to academic personnel in consideration with teaching responsibilities, research commitments, student consultation and additional support needs, participation in programme management and continuous development processes, as well as other academic obligations. As observed, academic and invited staff consistently participate in curriculum review, programme assessment and evaluation, consultation activities, as well as refinement of teaching approaches. The process is guided by the faculty management in coordination with the programme quality assurance teams.

Individual evaluation - An individual evaluation of the doctoral educational program or of the educational program for which a recommendation and/or advice is issued.

Description and Analysis - Programme 1 [Environmental Engineering, BA](#)
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Describe, analyse and evaluate the compliance of the doctoral level educational programme, or the educational program for which a recommendation and/or **suggestion** is issued, with the requirements of the component of the standard, based on the information collected through the self-evaluation report (SER), the enclosed documents and site-visit.

Environmental Engineering, BA

Number of the staff involved in the programme (including academic, scientific, and invited staff)	Number of Programme Staff	Including the staff with sectoral expertise ⁹	Including the staff holding PhD degree in the sectoral direction ¹⁰	Among them, the affiliated academic staff
Total number of academic staff	29	23	23	0
- Professor	5	2	2	0
- Associate Professor	13	10	10	0
- Assistant-Professor	0	0	0	0
- Assistant	0	0	0	0
Invited Staff	11	11	11	0
Scientific Staff	0	0	0	0
Including International Staff	0	0	0	0

The academic staff possess the qualifications and competencies necessary to achieve the intended learning outcomes of the study programme. The Head of the Programme demonstrates the knowledge, experience, and skills required for the effective development, implementation, and continuous improvement of the programme. However, the involvement of early-career academic staff in the implementation of the programme remains limited. To enhance the programme's long-term sustainability and ensure effective succession planning, the institution should encourage greater participation of young academics and create opportunities for their progressive integration into teaching, research, and programme development activities.

Agricultural Engineering, BA				
Number of the staff involved in the programme (including academic, scientific, and invited staff)	Number of Programme Staff	Including the staff with sectoral expertise ¹¹	Including the staff holding PhD degree in the sectoral direction ¹²	Among them, the affiliated academic staff
Total number of academic staff	31	23	23	0
- Professor	10	6	6	0

⁹ Staff implementing the relevant components of the main field of study

¹⁰ Staff with relevant doctoral degrees implementing the components of the main field of study

¹¹ Staff implementing the relevant components of the main field of study

¹² Staff with relevant doctoral degrees implementing the components of the main field of study

- Associate Professor	13	9	9	0
- Assistant-Professor	2	2	2	0
- Assistant	0	0	0	0
Invited Staff	6	6	6	0
Scientific Staff	0	0	0	0
Including International Staff	0	0	0	0

The academic personnel possess the qualifications, professional experience, and subject-specific expertise required to ensure the achievement of the program's intended learning outcomes. The program heads have the academic qualifications, professional experience, and managerial competencies necessary for the effective coordination and implementation of the program. They play an active role in the design, continuous evaluation, enhancement, and overall management of the educational program.

It is noteworthy that young personal are less involved in the implementation of the program. In terms of program sustainability, the institution should ensure the interest and involvement of young staff in the program.

Soil and Water Resources Engineering, BA				
Number of the staff involved in the programme (including academic, scientific, and invited staff)	Number of Programme Staff	Including the staff with sectoral expertise ¹³	Including the staff holding PhD degree in the sectoral direction ¹⁴	Among them, the affiliated academic staff
Total number of academic staff	31	24	24	0
- Professor	11	8	8	0
- Associate Professor	11	7	7	0
- Assistant-Professor	2	2	2	0
- Assistant	0	0	0	0
Invited Staff	7	7	7	0
Scientific Staff	0	0	0	0

¹³ Staff implementing the relevant components of the main field of study

¹⁴ Staff with relevant doctoral degrees implementing the components of the main field of study

Including International Staff	0	0	0	0
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The academic staff possess the qualifications, professional experience, and subject-specific expertise required to ensure the achievement of the program's intended learning outcomes.

The program is led by experienced academic staff with the qualifications, expertise, and managerial competencies necessary for its effective coordination and continuous development. The program heads play an active role in the planning, implementation, monitoring, evaluation, and ongoing enhancement of the educational program.

It is noteworthy that young personal is less involved in the implementation of the program. In terms of program sustainability, the institution should ensure the interest and involvement of young staff in the program.

Environmental Engineering, MA				
Number of the staff involved in the programme (including academic, scientific, and invited staff)	Number of Programme Staff	Including the staff with sectoral expertise¹⁵	Including the staff holding PhD degree in the sectoral direction¹⁶	Among them, the affiliated academic staff
Total number of academic staff	16	12	12	0
- Professor	5	3	3	0
- Associate Professor	4	2	2	0
- Assistant-Professor	0	0	0	0
- Assistant	0	0	0	0
Invited Staff	7	7	7	0
Scientific Staff	0	0	0	0
Including International Staff	0	0	0	0

Evidences/Indicators

- CVs, diplomas and publications of academic and invited staff

¹⁵ Staff implementing the relevant components of the main field of study

¹⁶ Staff with relevant doctoral degrees implementing the components of the main field of study

- Documents confirming participation of academic and invited personnel in conferences
- Statute of Sokhumi State University
- Certificates confirming participation of academic personnel in training programs
- Methodology for determining the number of personnel
- Faculty Regulations
- Job descriptions of administrative and support personnel

Recommendations and Suggestions according to the programmes:	<u>Recommendation(s):</u> Please, write the developed recommendations that apply equally to the educational programmes grouped in the cluster. Also, please indicate, according to individual programs (if any)	<u>Suggestion(s):</u> Please, write the developed suggestions that apply equally to the educational programmes grouped in the cluster. Also, please indicate, according to individual programs (if any)
General recommendations/ Suggestion of the Cluster	To ensure the long-term sustainability and smooth operation of the study programme, it is recommended to strengthen academic staff capacity and expand the teaching workforce, thereby ensuring a more balanced distribution of teaching responsibilities and reducing excessive teaching workloads. The university should also prioritise the recruitment of new (young) professors and early-career academics to support teaching activities and enhance the programmes long-term development and continuity.	
Environmental Engineering, BA		
Agricultural Engineering, BA		
Soil and Water Resources Engineering, BA		
Environmental Engineering, MA		

Evaluation

Please, evaluate the compliance of the programmes with the component

Component 4.1 Human Resources	Evaluation
Environmental Engineering, BA	Substantially
Agricultural Engineering, BA	Substantially
Soil and Water Resources Engineering, BA	Substantially
Environmental Engineering, MA	Substantially

4.2 Qualification of Supervisors of Master's and Doctoral Students

Accreditation standards indicators

Master's and Doctoral students have qualified supervisor/supervisors and, if necessary, co-supervisor/co-supervisors who have relevant scientific-research experience in the field of research.

PHD Programme indicators

- HEI has developed qualification requirements for scientific supervisor/co-supervisor, which respond to the specifics of the programme and international best practice;
- Due to the specifics and development of the field, the scientific supervisor of each doctoral student is equipped with the latest knowledge, has the academic degree in the relevant field, has experience of supervision/co-supervision, or has completed a relevant activity (training, seminar, professional development course, etc.), as well as actively participated in scientific research and/or has published a scientific work (in the field of art - creative/performing project) which corresponds to the general topic/research field of the doctoral thesis;
- Due to the specifics and development of the field, the doctoral student's supervisor has published at least 1 scientific paper (in the field of arts - creative/performing project) in the foreign peer-reviewed journal with the international index defined by the HEI during the last 3 years, and this paper corresponds to the general topic/research field of the doctoral student's doctoral thesis;
- The supervisor of the doctoral student, as well as in the case of several supervisors, one of the supervisors, is an academic (professor, associate professor) and/or scientific staff of the HEI with doctoral degree or equivalent to the doctoral degree. The requirement in the section on holding an academic position does not apply to an international supervisor/co-supervisor;
- The doctoral student's supervisor has professional connection with the local and international scientific/artistic community (joint researches/grants/projects, scientific associations/unions/educational/scientific institutions);
- The qualification requirements of the co-supervisor correspond to the topic/research field of the doctoral student's doctoral thesis;
- HEI periodically provides the doctoral thesis supervisor with such activities (training, seminar, workshop, etc.) that facilitate the effective implementation of supervision;
- HEI has developed mechanisms to encourage doctoral students' supervisors in the doctoral education programme;

Summary and Analysis of the Compliance of the Educational Programmes Grouped in a Cluster with the Requirements of the Standard Component

Cluster evaluation

Description and Analysis of Cluster

The Master's programme in Environmental engineering is supported by a highly qualified academic and invited staff whose scientific expertise and research experience provide students with access to a wide range of research topics, as well as thematic areas. The personnel involved in the programme possesses relevant and adequate qualifications. Their research achievements have been verified through the evidence presented by the HEI.

The university has established clear qualification requirements for master's thesis supervisors and co-supervisors in accordance with the programme objectives. The requirements are further provided by institutional regulations. The process of master's thesis supervision is organised through close collaboration between the student and the supervisor. Initially, the faculty sets thematic areas within which students have a free choice to decide on the specific focus of their research. Upon selecting a research topic, students start working with their supervisors on individual work plans that outline how the research objectives will be met for each of the milestone. Throughout the period, supervisors provide methodological and academic guidance and monitor the progress of work. Supervisors also assist their students in preparing for the presentation and defence of their master's thesis.

The site visit confirmed the Faculty's practice of organising introductory and consultation meetings involving academic staff and students. These interactions provide students with an opportunity to become familiar with the research interests, areas of expertise, and ongoing academic activities of faculty members. At the same time, discussions with students and academic staff indicated that the selection of thesis topics is primarily driven by students' individual academic interests and professional aspirations. Students typically identify research areas they wish to explore and subsequently seek guidance from academic staff whose expertise is most closely aligned with their chosen topic. The flexibility of the supervision arrangements allows students to develop original research topics while benefiting from the scientific expertise available within the Faculty and, where relevant, partner institutions. The combination of qualified supervisors, clear supervision procedures, and student-centred topic selection contributes to the quality of master's research and supports the achievement of the programme's learning outcomes.

The university presented evidence of personnels' participation in international, as well as national scientific conferences, forums, seminars, and other events. The students further mentioned that HEI personnel regularly encourage and invite them too to take part in such events. This supports the continuous development of both academic and invited staff, as well as master's students, as well as ensures that they are constantly kept up to date with the latest research trends and developments.

Overall, the evidence reviewed during the accreditation process demonstrates that the programme has adequate supervisory capacity and appropriate mechanisms to support students throughout the preparation, implementation, and successful completion of their master's theses.

We couldn't, however, verify the number of academic and invited staff designated as master's supervisors. Nor could we check how many of those personnel held PhD degree in the sectoral director or among them, how many were affiliated academic staff due to the lack of relevant documents submitted by the HEI. However, given that the programme is newly established, these limitations may partly reflect the early stage of programme development and the ongoing establishment of its academic and administrative structures.

Individual evaluation - An individual evaluation of the doctoral educational program or of the educational program for which a recommendation and/or advice is issued.

Description and Analysis - Programme 1 (Name and Level)

Describe, analyse and evaluate the compliance of the doctoral level educational programme, or the educational program for which a recommendation and/or suggestion is issued, with the requirements of the component of the standard, based on the information collected through the self-evaluation report (SER), the enclosed documents and site-visit.

Environmental Engineering, MA			
Number of supervisors of Master's/Doctoral theses	These supervisors	Including the supervisors holding PhD degree in the sectoral direction¹⁷	Among them, the affiliated academic staff
Number of supervisors of Master's/Doctoral theses	5	-	-
- Professor	2	-	-
- Associate Professor	3	-	-
- Assistant-Professor	-	-	-
Invited Staff	-	-	-
Scientific Staff	-	-	-
Including International Staff	-	-	-

Evidences/Indicators

- CVs of academic and invited staff, list of diplomas and academic work.
- Evidence of participation of personnel in international conferences and seminars.

¹⁷ Theses supervisors having a PhD degree relevant to the qualification awarded by the educational programme.

Recommendations and Suggestions according to the programmes:	Recommendation(s): Please, write the developed recommendations that apply equally to the educational programmes grouped in the cluster. Also, please indicate, according to individual programs (if any)	Suggestion(s): Please, write the developed suggestions that apply equally to the educational programmes grouped in the cluster. Also, please indicate, according to individual programs (if any)
General recommendations/ Suggestion of the Cluster		
Environmental Engineering, MA	Ensure that the university has defined and designated staff for supervising master's students during the preparation of their theses	

Evaluation

Please, evaluate the compliance of the programmes with the component

Component <u>4.2 Qualification of Supervisors of Master's and Doctoral Students</u>	Evaluation
Programme 1 (name, level)	-
Programme 2 (name, level)	-
Programme 3 (name, level)	-
Programme 4 (Environmental Engineering, MA)	Substantially

4.3 Professional Development of Academic, Scientific and Invited Staff

Accreditation standards indicators

- The HEI conducts the evaluation of programme staff and analyses evaluation results on a regular basis.
- The HEI fosters professional development of the academic, scientific and invited staff. Moreover, it fosters their scientific and research work.

Summary and Analysis of the Compliance of the Educational Programmes Grouped in a Cluster with the Requirements of the Standard Component

Cluster evaluation

Description and Analysis of Cluster

The submitted documentation indicates that the development of the programmes was undertaken with the involvement of the faculty QA staff in accordance with the university regulation on planning, development and improvement of educational programmes. The documentation further indicates that working meetings were held with academic and invited staff members and these meetings included consultation and professional recommendations aimed at ensuring the quality of higher education. Yet, during the field visit, some of the university staff noted that due to the limited time during which the programme evaluation should be developed was quite limited, thus meaningful consultation time window was quite small.

With regard to staff evaluation, the university has developed questionnaires at faculty level, including a questionnaire through which academic staff evaluate the programme, a questionnaire assessing staff involvement in programme development and improvement, and a questionnaire determining the level of satisfaction of academic staff. This corresponds to the expectation of the standard that the staff evaluation and staff satisfaction results should be conducted, analysed and, finally, be used for staff management and continuous development. The evidence presented by the HEI also shows that students, graduate and employer feedback mechanisms are further used in the programme development. Students are expected to evaluate the academic staff and the course content too once the course is finalised. Employers are also involved through meetings and questionnaires on graduate competencies and labour-market needs. These represent a relevant quality-assurance environment for staff development needs within this presented cluster.

The documentation further indicates that the university continuously organises working meetings with academic staff to keep them informed about the ongoing changes and innovations in the areas. The team of experts were also convinced that academic personnel participate in professional development trainings, research projects and other activities/events.

The QA analysis document provides additional evidence that staff involved in the teaching process participated in development of educational programmes. A total of 20 beneficiaries participated in the staff survey. The majority of respondents stated that the programmes ensured the acquisition and development of theoretical knowledge, as well as skills, and 80% of participants stated that they are course authors and actively participated in course adjustments. 90% of respondents stated that they actively participated in the programme modification process and also had sufficient information regarding the programme-level changes.

The survey results show that the staff generally assessed the programmes positively. They mentioned that programme objectives were clear, realistic, and achievable. They further mentioned that learning outcomes directly correspond to programme objectives. The vast majority of participants further agreed

that admission requirements, complexity of the courses, sequencing, as well as practical elements of the courses were adequate to the learning objectives and outcomes.

Having said that, the evidence provided would be stronger if the HEI systematically demonstrated how staff evaluation results and staff satisfaction survey findings are translated into individual or collective professional development actions, including: targeted trainings, methodological support, research support, mentoring, international mobility, even e-learning capacity-sharing measures. The 4.3 standard requires not only the existence of such mechanisms, but, most importantly, the active utilisation of their results. Therefore, while the cluster remonstrates several positive mechanisms, the assessment needs to be more robust in the institution presented a clear evidence chain from staff evaluation, to identified development needs, implementation of development activities and, finally, measured improvement and follow-up actions.

Individual evaluation - An individual evaluation of the doctoral educational program or of the educational program for which a recommendation and/or advice is issued.

Description and Analysis - Bachelor's Educational Program in Agricultural Engineering

The Bachelor's Educational Program in Agricultural Engineering generally benefits from the cluster-level mechanisms for staff evaluation and professional development. However, because the programme is new and field/practice-oriented, it is advisable to ensure programme-specific documentation of staff-development needs and activities, especially in relation to practical training, modern agroengineering technologies, teaching methods, assessment practices, and research engagement.

Description and Analysis - Bachelor's Educational Program in Environmental Engineering

The programme generally complies with the cluster-level approach to Standard 4.3. To strengthen the evidence, the programme should demonstrate how academic and invited staff are supported in updating field-specific knowledge, laboratory/practical teaching approaches, environmental monitoring methods, and use of modern scientific/technical resources.

Description and Analysis - Bachelor's Educational Program in Environmental Engineering

The programme generally benefits from the cluster-level professional-development mechanisms. The programme would be strengthened by documenting programme-specific staff-development actions connected to soil and water resource management, hydrological and laboratory methods, practical/industrial training, modern agroengineering systems, and research activity.

Description and Analysis - Bachelor's Educational Program in Environmental Engineering

The Master's programme generally falls within the cluster-level mechanisms for staff evaluation and development. However, because of its level and research component, the programme should present particularly clear evidence that supervisors and staff involved in the research component receive

systematic professional development in research supervision, research methodology, publication standards, international research cooperation, and modern environmental engineering technologies.

Evidences/Indicators

- Staff evaluation and staff satisfaction survey results;
- Academic staff programme-evaluation questionnaires, staff involvement questionnaires, and academic staff satisfaction questionnaires
- Student, graduate and employer survey results used for programme development;
- QA working meeting records with academic and invited staff
- Documentation confirming professional-development trainings, exchange projects and similar activities
- Staff survey analysis showing participation of staff in programme development, modification and course review
- Evidence of staff awareness of international cooperation projects and research-support mechanisms.

Recommendations and Suggestions according to the programmes:	Recommendation(s): Please, write the developed recommendations that apply equally to the educational programmes grouped in the cluster. Also, please indicate, according to individual programs (if any)	Suggestion(s): Please, write the developed suggestions that apply equally to the educational programmes grouped in the cluster. Also, please indicate, according to individual programs (if any)
General recommendations/ Suggestion of the Cluster	• Ensure that staff evaluation and staff satisfaction survey results are systematically translated into an annual professional-development plan for academic, scientific and invited staff, with clear evidence of identified needs, planned activities; participation of staff, resources allocated, implementation results; and follow-up actions. This is necessary because the standard requires that staff-evaluation and satisfaction survey results be actively used for professional	Develop a concise annual “Staff Development Matrix” for the cluster to connect each programme’s teaching, research and practical-training needs with relevant professional-development activities such as trainings, workshops, peer observation, conference participation, research seminars, international mobility, e-learning/digital teaching training, and methodological support.

	improvement and staff-support mechanisms.	
Programme 1 - Bachelor's Educational Program in Agricultural Engineering	Ensure that the annual staff-development plan includes programme-specific needs related to agro-engineering, agricultural machinery, melioration systems, practical/field training, and assessment of practice-oriented learning outcomes.	
Programme 2 - Bachelor's Educational Program in Environmental Engineering	Ensure that staff-development planning explicitly covers environmental monitoring, pollution-control technologies, laboratory/practical teaching methods, current environmental regulation, and assessment of practice-oriented competencies.	Strengthen staff participation in seminars, trainings and conferences related to environmental protection technologies, wastewater/air-pollution treatment methods, ecological monitoring, and digital/laboratory teaching tools
Programme 3 - Bachelor's Educational Program in Soil and Water Resources Engineering	For the Bachelor's Educational Program in Soil and Water Resources Engineering, ensure systematic documentation of staff-development activities related to soil science, water resources management, hydrology, irrigation/drainage systems, laboratory methods, and industrial/practical training	Create programme-specific professional-development measures for staff focused on modern soil and water resource engineering methods, practical-supervision approaches, applied research, and cooperation with relevant public/private sector organizations
Programme 4 - Master's Educational Program in Environmental Engineering	Make sure that supervisors and staff involved in the research component receive targeted professional development in research supervision, research methodology, publication ethics, academic writing, international research cooperation, and the use of modern environmental engineering technologies. This is particularly important because the standard requires support for scientific/research work and participation in international projects, research and conferences.	Ensure that there are at least annual workshops covering supervision planning, feedback practices, assessment of research progress, publication guidance, research ethics, and integration of students into local/international scientific networks.

Evaluation

Please, evaluate the compliance of the programmes with the component

Component 4.3 Professional Development of Academic, Scientific and Invited Staff	Evaluation
Programme 1 - Bachelor's Educational Program in Agricultural Engineering	Partially
Programme 2 - Bachelor's Educational Program in Environmental Engineering	Partially
Programme 3 - Bachelor's Educational Program in Soil and Water Resources Engineering	Partially
Programme 4 - Master's Educational Program in Environmental Engineering	Partially

4.4. Material Resources

Accreditation standards indicators

Programme is provided with necessary infrastructure, information resources relevant to the field of study and technical equipment required for achieving programme learning outcomes.

PHD Programme indicators

- The doctoral education programme is equipped with the necessary research and artistic-creative infrastructure and technical equipment (scientific laboratory, computer resource, information resource, digital resource, individual working spaces for doctoral students, etc.), which are necessary for the implementation of the educational and scientific-research components of the educational programme and for the achievement of the learning outcomes;
- Library book fund, latest scientific periodicals, international electronic library bases both from the university territory and from any other location are available for doctoral students, which allow them to have access and get to know the scientific resources of the relevant research field to achieve the learning outcomes of programme;
- In order to implement the scientific-research component, the HEI promotes the sharing of scientific-research infrastructure both within the institution and among other higher educational and scientific institutions outside it;
- HEI constantly takes care of the renewal and development of scientific-research/creative research infrastructure.

Summary and Analysis of the Compliance of the Educational Programmes Grouped in a Cluster with the Requirements of the Standard Component

Cluster evaluation

The programme is provided with material resources, including laboratories, a library, computer laboratories, and an examination centre. Sokhumi State University has an agreement with Georgian Technical University on the use of material resources. During the site visit, the expert panel inspected the material resources at two locations: Sokhumi State University, located at 61 Anna Politkovskaya Street, and at 17 Guramishvili Avenue.

According to the inventory records, the University library includes 39,025 printed books. At the same time, the University has an electronic library, a corresponding website, and an electronic catalog, where textbooks have been uploaded. The library contains textbooks, lecture courses, readers, and other materials in both printed and electronic formats. The existing collection is diverse, regularly updated, and supports the achievement of educational program learning outcomes as well as research/scientific activities. The core literature indicated in syllabi is accessible.

The expert panel reviewed the learning resources for the courses included in all four programmes within the library. Several resources could not be located, or only their titles and information indicating that the resource listed in the syllabus was available in the library of Georgian Technical University could be found in the catalogue. According to the programme implementers, as the integration process between the Agricultural Faculty of Georgian Technical University and Sokhumi State University is currently underway, the linkage between the two library databases has not yet been fully completed.

The syllabi of the programmes includes in the cluster indicate laboratory sessions, consultations, and seminars that are conducted in various buildings of Georgian Technical University. This creates significant challenges in terms of academic timetable planning and scheduling.

Therefore, it is recommended that Sokhumi State University ensure that the laboratories and lecturers' working spaces specified within the programmes are located at a single site.

Describe, analyse and evaluate the compliance of the educational programmes grouped in the cluster with the requirements of the component of the standard, based on the information collected through the self-evaluation report (SER), the enclosed documents and site-visit.

Individual evaluation - An individual evaluation of the doctoral educational program or of the educational program for which a recommendation and/or advice is issued.

Description and Analysis - Programme 1 (Agricultural Engineering B.S)

Describe, analyse and evaluate the compliance of the doctoral level educational programme, or the educational program for which a recommendation and/or **suggestion** is issued, with the requirements of

the component of the standard, based on the information collected through the self-evaluation report (SER), the enclosed documents and site-visit.

The programme is equipped with laboratories, learning resources, computer laboratories, and classrooms, which are furnished with smart boards and other necessary equipment.

The programme includes laboratory sessions within its courses. For example, in the course strength of materials, the syllabus author's workplace is listed as 68 M. Kostava Street, Building I, Georgian Technical University, and the laboratory is also located at this address. The syllabi further indicate that laboratory sessions are conducted at various locations of Georgian Technical University.

Description and Analysis - Programme 2 (Environmental Engineering B.S)

The programme is equipped with laboratories, learning resources, computer laboratories, and classrooms, which are furnished with smart boards and other necessary equipment.

The programme includes laboratory sessions within its courses. For example, for the course Industrial Sewage Control and Purification, the syllabus author's workplace is listed as 69 M. Kostava Street, Building II, Georgian Technical University, Tbilisi. The syllabi also indicate that laboratory sessions are conducted at various locations of Georgian Technical University.

Description and Analysis - Programme 3 (Soil and Water recourse engineering B.S)

The programme is equipped with laboratories, learning resources, computer laboratories, and classrooms, which are furnished with smart boards and other necessary equipment.

The programme includes laboratory sessions within its courses. For example, for the course Engineering Graphics and Introductory Design, the syllabus author's workplace is listed as 68 M. Kostava Street, Building I, Georgian Technical University, Tbilisi. The syllabi also indicate that laboratory sessions are conducted at various locations of Georgian Technical University.

Description and Analysis - Programme 2 (Environmental Engineering M.S)

The programme is equipped with laboratories, learning resources, computer laboratories, and classrooms, which are furnished with smart boards and other necessary equipment.

The programme includes laboratory sessions within its courses. For example, for the course Laboratory Work in Environmental Engineering, the syllabus author's workplace is listed as 69 M. Kostava Street,

Building I, Georgian Technical University, Tbilisi. The syllabi also indicate that laboratory sessions are conducted at various locations of Georgian Technical University.

Evidences/Indicators

- Visual inspection;
- Computer laboratories/classrooms.
- Appropriate infrastructure;
- Relevant agreements/contracts

Recommendations and Suggestions according to the programmes:	<u>Recommendation(s):</u> Please, write the developed recommendations that apply equally to the educational programmes grouped in the cluster. Also, please indicate, according to individual programs (if any)	<u>Suggestion(s):</u> Please, write the developed suggestions that apply equally to the educational programmes grouped in the cluster. Also, please indicate, according to individual programs (if any)
General recommendations/ Suggestion of the Cluster	It is recommended that Sokhumi State University ensure that the laboratories and lecturers' working spaces specified within the programmes are located at a single site.	
Programme 1 (name, level)		
Programme 2 (name, level)		
Programme 3 (name, level)		
Programme 4 (name, level)		

Evaluation

Please, evaluate the compliance of the programmes with the component

Component <u>4.4. Material Resources</u>	Evaluation
Programme 1 (name, level)	Partially

Programme 2 (name, level)	Partially
Programme 3 (name, level)	Partially
Programme 4 (name, level)	Partially

4.5. Programme/Faculty/School Budget and Programme Financial Sustainability

Accreditation standards indicators

The allocation of financial resources stipulated in programme/faculty/school budget is economically feasible and corresponds to the programme needs.

PHD Programme indicators

- The budget of the HEI/faculty/school/programme provides support and funding mechanisms to the doctoral students for implementation of the teaching and research components of the doctoral education programme.
- The budget of the HEI/faculty/school/programme provides sources/mechanisms of financial support to facilitate the implementation of research by academic and/or research staff, including funding for publishing scientific articles in peer-reviewed journals with international index, for participation in scientific conferences, research trips and research/creative projects, for publication monographs and other research, creative/performing activities;
- The budget of the HEI/faculty/school/programme for the effective implementation of the doctoral education programme envisages the development of scientific-research/artistic infrastructure;
- The HEI facilitates the search for external funding sources for targeted research within the doctoral education programme.

Summary and Analysis of the Compliance of the Educational Programmes Grouped in a Cluster with the Requirements of the Standard Component

Cluster evaluation

Description and Analysis of Cluster

Within the framework of current transformations of higher educational system initiated by the Ministry of Education, Science and Youth of Georgia, the financing system of the programs included in the cluster has been completely changed, particularly all programs delivered at state institution of higher education will be fully funded by the state. The budget of the university and each program will not depend on tuition fees paid by students. The programs presented in cluster are among expensive educational programmes, requiring expenditures for the maintenance/ purchase/upgrade of laboratories, equipment and facilities. In the 2026-2027 academic year, only first-year students will study at the SSU's auditoriums and

laboratories, while older students enrolled at the programmes at Georgian Technical University will continue their study at Georgian Technical University. According to the memorandum signed between the Georgian Technical University (GTU) and Sokhumi State University, students and staff of Sokhumi State University will be allowed to use the material and technical base of the GTU academic building located at D. Guramishvili Street No. 17 in Tbilisi, where they will jointly carry out research and other types of academic activities. The aforementioned Memorandum does not impose any direct financial obligations on the parties. When the scope of a specific project or research requires the incurrence of expenses (for example, consumables, equipment, etc.), the parties will sign an additional written agreement in each specific case, detailing the cost estimate and sources of financing.

The institution has submitted the budget for the Faculty of Natural Sciences, Mathematics, Technology and Pharmacy of Sukhumi State University for 2026/2027. The faculty budget is calculated for 1070 students of the faculty and gives description of costs related to the implementation of the programs. A separate budget is not submitted for each program.

Interviews with the SSU administration revealed that, as part of the reform, they were asked to only include expenses in the budget, determining what is needed to implement the program. The government will develop an algorithm for how to finance the programs. The institution already has the costs of these programs included in the current faculty budget. The budget presented by the institution, along with other expenses, also includes research expenses, which include support for academic staff, undergraduate and graduate research. The state will have a separate approach to doctoral research and will fund it separately. A new faculty is being created at SSU within the scope of the current reform (the university's academic council has already approved the decision, although the new charter has not yet been approved). The new Faculty will unite the programs presented in the cluster, as well as other programs transferred from the Georgian Technical University. A new budget (expenses section) for the new faculty will be prepared, in which expenses will be determined separately for each program. Funding will be tied to the needs of the program, and the funds necessary for their sustainability will be allocated.

The information collected through the self-evaluation report presented by the SSU, the enclosed documents and site-visit interviews indicate that transfer of educational programs from Georgian Technical University to SSU is still ongoing process and to ensure the financial sustainability of the programs, details still need to be clarified. Accordingly, a detailed and thematic targeted budget must be developed for each program presented in the cluster.

Individual evaluation - An individual evaluation of the doctoral educational program or of the educational program for which a recommendation and/or advice is issued.

Description and Analysis - Programme 1 (Agricultural Engineering, BA)

See cluster description and analysis.

Description and Analysis - Programme 2 (Environmental Engineering, BA)

See cluster description and analysis.

Description and Analysis - Programme 3 (Soil and Water Resources Engineering, BA)

See cluster description and analysis.

Description and Analysis - Programme 4 (Environmental Engineering, MA)

See cluster description and analysis.

Evidences/Indicators

- Component evidences/indicators, including the relevant documents and interview results

Recommendations and Suggestions according to the programmes:	<u>Recommendation(s):</u> Please, write the developed recommendations that apply equally to the educational programmes grouped in the cluster. Also, please indicate, according to individual programs (if any)	<u>Suggestion(s):</u> Please, write the developed suggestions that apply equally to the educational programmes grouped in the cluster. Also, please indicate, according to individual programs (if any)
General recommendations/ Suggestion of the Cluster	Develop detailed and thematic targeted budget for each program presented in the cluster.	
Programme 1 (Agricultural Engineering, BA)		
Programme 2 (Environmental Engineering, BA)		
Programme 3 (Soil and Water Resources Engineering, BA)		
Programme 4 Environmental Engineering, MA)		

Evaluation

Component 4.5. Programme/Faculty/School Budget and Programme Financial Sustainability	Evaluation
Programme 1 (Agricultural Engineering, BA)	Substantially
Programme 2 (Environmental Engineering, BA)	Substantially
Programme 3 (Soil and Water Resources Engineering, BA)	Substantially
Programme 4 Environmental Engineering, MA)	Substantially

5. Teaching Quality Enhancement Opportunities

In order to enhance teaching quality, programme utilizes internal and external quality assurance services and also periodically conducts programme monitoring and programme review. Relevant data is collected, analysed and utilized for informed decision making and programme development.

5.1. Internal Quality Evaluation

Accreditation standards indicators

Programme staff collaborates with internal quality assurance department(s)/staff available at the HEI when planning the process of programme quality assurance, developing assessment instruments, and implementing assessment process. Programme staff utilizes quality assurance results for programme improvement.

PHD Programme indicators

- Internal quality assurance mechanisms of the doctoral educational programme include the evaluation of the scientific-research component, resources, and support mechanisms of the doctoral student. Evaluation results are applied for the improvement of the HEI's activities and the doctoral programme.
- The activities of the staff implementing the teaching and scientific components of the programme, including the supervisor/co-supervisor of the doctoral thesis are evaluated within the framework of the monitoring of the doctoral educational programme and the evaluation results are used to improve the staff performance;
- The doctoral education programme regularly uses formative peer review to improve the doctoral programme and the research environment;

- In order to develop a doctoral programme, all the interested parties (doctoral student, graduate, staff, doctoral student's supervisor, co-supervisor, employer, etc.) are involved in the evaluation of the doctoral programme implementation.

Summary and Analysis of the Compliance of the Educational Programmes Grouped in a Cluster with the Requirements of the Standard Component

Cluster evaluation

Description and Analysis of Cluster

The quality assurance processes at the university are regulated by the document "Mechanisms for Assessing the Opportunities for the Development of Teaching Quality" approved by the Academic Council on April 20, 2012. The self-evaluation report presented by the University and interview results demonstrate that the university has established an internal quality assurance system aimed at improving the quality of educational programmes, teaching and learning processes, research activities, and institutional resources. The quality assurance system is integrated into the university management process and is linked to the institution's mission, strategic development plan, and operational policies.

Existing regulations on mechanisms for evaluating teaching quality and program development opportunities describe the mechanisms for evaluating educational programs, educational processes, scientific work, and personnel. These mechanisms include a self-assessment component as well as surveys, questionnaires, and external assessments. At the same time, the involvement of various interested parties in the process of program development and the research of their opinions and attitudes are considered.

In General, in the process of the elaboration of the educational programs academic and invited personnel collaborates with internal quality assurance service and takes into consideration quality assurance results. In the process of the development of the program together with university administrative and academic/invited personnel, other stakeholders such as potential employers, graduates, and students also are involved. According to existing rules and practice at Sokhumi State University (SSU), academic and visiting staff involved in the programs, as well as faculty administrative staff, collaborate with the internal quality assurance service at both the university and faculty level in planning the program quality assessment process, developing assessment tools and conducting the evaluation, and use the quality assessment results to improve the programs.

The quality assurance system at the university operates based on the principles of the "Plan, Do, Check, Act" (PDCA) cycle. Quality assurance is a continuous process, and internal quality assurance mechanisms are implemented in it. Within the framework of the PDCA cycle, the first stage involves planning evaluation processes, defining evaluation criteria, indicators, and responsible persons. The next stage focuses on the implementation of planned activities, including programme evaluation, monitoring of the teaching and learning process, and conducting various surveys and studies. Particular attention is paid to the analysis of students' academic performance, which represents one of the key indicators of the

effectiveness of the teaching and learning process. At the checking and analysis stage, the university evaluates the obtained results, identifies problematic issues, and analyzes their underlying causes.

Based on the process mentioned above, the Quality Assurance Service, in cooperation with the faculty, develops recommendations aimed at improving educational programmes and the teaching and learning process. These recommendations are submitted to the Academic Council and Faculty Councils for further consideration and planning of development activities. University develops strategic development and action plans (<https://www.sou.edu.ge/content/2/65/0/0/0>) as well as discusses annual reports of the quality assurance office. The quality assurance service is engaged in consulting activities for all segments of the faculty, to implement educational activities in accordance with the standards established by the legislation.

The quality assurance system at Sokhumi State University functions as follows: the administration of the quality assurance service is involved in all stages of the implementation of the educational process, which involves the principle of planning, implementation, inspection (continuous evaluation, analysis of results) and development. In General, evaluation of educational processes is done regularly and involves the development of mechanisms for solving specific problems identified by the self-evaluation process. The interviews conducted with administrative and academic staff confirmed that programme staff cooperate with faculty and university level quality assurance services during the implementation stage of the programmes.

Despite the fact that several working meetings have been held both at Georgian Technical University and Sokhumi State University at the administrative level in order to support the transition and implementation processes, existing quality assurance mechanisms and educational programs evaluation procedures partially were applied towards educational programs presented in the cluster because of short time period due to the reforms initiated by the Ministry of Education, Science and Youth of Georgia. In the framework of initiated reforms educational programs presented in cluster were transferred from The Georgian Technical University to Sokhumi State University.

Interviews with the academic staff and program heads revealed that they during the interviews, they have not yet had sufficient time to fully familiarize themselves with the university's internal regulations related to programme planning, evaluation, development processes, quality assurance mechanisms, and the responsibilities. According to the interview participants, main challenges are linked to the rapid transition process from Georgian Technical University to Sokhumi State University within a limited timeframe. Several meetings were conducted with the personnel involved in the implementation of the programs during the integration process, but these meetings were mainly focused on administrative and organizational issues. Work is still in progress to merge administrative, material, financial, human and organizational resources under the management of SSU and certain administrative issues are currently in the process of clarification and approval. It is recommended to establish collaborative processes related to programme planning, evaluation, monitoring, and development by systematic working meetings and consultations for the personnel involved in the implementation of the educational programs.

To develop the programs grouped in cluster, a self-evaluation group was created that regularly held meetings and discussed issues related to program development. The programs were developed following the principles of cooperation between Sokhumi State University and Georgian Technical University. The documents attached to the self-evaluation report (including memoranda and other supporting materials) were presented under the name of the Georgian Technical University and prepared using its institutional templates. It is recommended that Sokhumi State University update programme-related documentation under the University's name and official format.

Each member of the self-assessment group took care of identifying the areas for improvement during the work on the self-assessment report. Although the areas for improvement and certain challenges still remain (see details in the narrative parts of standards 1-4). It is recommended that within the framework of self-evaluation of the educational programs when evaluating the content of the programs, study courses and available resources necessary to implement the educational programs, the University implement a mechanism to detect and prevent shortcomings.

For the monitoring and evaluation of the electronic/distance learning process, during the Corona pandemic period the university adopted the special regulations for the study process (Academic Council resolution № 05/01-608; 24. 03. 2020) to ensure the adaptation of internal quality assurance mechanisms for the distance/hybrid study process.

Individual evaluation - An individual evaluation of the doctoral educational program or of the educational program for which a recommendation and/or advice is issued.

Description and Analysis - Programme 1 (Agricultural Engineering, BA)

See cluster description and analysis.

Description and Analysis - Programme 2 (Environmental Engineering, BA)

See cluster description and analysis.

Description and Analysis - Programme 3 (Soil and Water Resources Engineering, BA)

See cluster description and analysis.

Description and Analysis - Programme 4 (Environmental Engineering, MA)

See cluster description and analysis.

Describe, analyse and evaluate the compliance of the doctoral level educational programme, or the educational program for which a recommendation and/or **suggestion** is issued, with the requirements of the component of the standard, based on the information collected through the self-evaluation report (SER), the enclosed documents and site-visit.

Evidences/Indicators

- Educational programs and syllabi;
- Mechanisms for Evaluating Teaching Quality Enhancement Opportunities (Resolution of Academic Council of Sukhumi State University #05/01 - 20, 20.04.2012);
- The Methodology of approval, planning and development of graduate programs;
- Methodology for planning, designing and development of undergraduate program
- Regulation for study process;
- Webpage of the university <https://www.sou.edu.ge/home>;
- Job market research documents;
- Programs learning outcome evaluation mechanism;
- Regulations for distance/electronic study process (Academic Council resolution № 05/01-608; 24. 03. 2020);
- Survey forms for students and personnel, graduates and employers;
- Analysis of students, graduates and personnel surveys for related programs,
- Interviews with representatives of university administration, academic/invited personnel and employers;
- Interviews with representatives of students and alumni from related programs;
- Self-evaluation report presented by the Sokhumi State University.
-

Recommendations and Suggestions according to the programmes:	<u>Recommendation(s):</u> Please write the developed recommendations that apply equally to the educational programmes grouped in the cluster. Also, please indicate, according to individual programs (if any)	<u>Suggestion(s):</u> Please, write the developed suggestions that apply equally to the educational programmes grouped in the cluster. Also, please indicate, according to individual programs (if any)
General recommendations/ Suggestion of the Cluster	• It is recommended that Sokhumi State University complete the adaptation and formal adoption of all program-related documentation within its institutional framework and strengthen the self-	• It is suggested that the university organize systematic working meetings, consultations, and training activities for academic and invited staff involved in the cluster programs in order to strengthen quality culture, facilitate familiarity with

		evaluation process to ensure the systematic identification, analysis, and elimination of deficiencies related to program content, learning resources, staffing, infrastructure, and implementation arrangements. • Provide clearer evidence demonstrating how the cooperation mechanisms established with Georgian Technical University support the effective and sustainable transfer and implementation of the educational programs. • It is recommended that Sokhumi State University update programme-related documentation under the University's name and official format.	institutional regulations and quality assurance procedures, and support their active participation in programme planning, monitoring, evaluation, and continuous improvement processes.
Programme 1 (Agricultural Engineering, BA)			
Programme 2 (Environmental Engineering, BA)			
Programme 3 (Soil and Water Resources Engineering, BA)			
Programme 4 Environmental Engineering, MA)			

Evaluation

- Please, evaluate the compliance of the programmes with the component

Component 5.1. Internal Quality Evaluation	Evaluation
Programme 1 (Agricultural Engineering, BA)	Substantially
Programme 2 (Environmental Engineering, BA)	Substantially
Programme 3 (Soil and Water Resources Engineering, BA)	Substantially
Programme 4 Environmental Engineering, MA)	Substantially

5.2. External Quality Evaluation

Accreditation standards indicators

Programme utilizes the results of external quality assurance on a regular basis.

Summary and Analysis of the Compliance of the Educational Programmes Grouped in a Cluster with the Requirements of the Standard Component

Cluster evaluation

Description and Analysis of Cluster

The external mechanisms for the evaluation of the quality of educational process are authorization and accreditation processes according to the Georgian Legislation: the external mechanisms for evaluating the implementation of the educational program are based on the "Regulation on the Accreditation of Educational Programs of Educational Institutions" and the "Regulation on the Authorization of Educational Institutions".

Sokhumi State University periodically submits information about each educational program to the legal entity under public law to the National Center for Education Quality Development in the form of a self-evaluation report in accordance with the established deadlines and forms. The personnel involved in the program consider the recommendations received by experts during authorization and accreditation and make appropriate changes to the program. The changes to be implemented in the program are discussed by the head of the program and the staff involved in the program.

Educational programs presented in the cluster were evaluated by local and foreign external experts during the previous accreditation process at Georgian Technical University, in particular:

- **Programme 1** (Agricultural Engineering, BA) as the program implemented at Georgian Technical University was accredited by The Accreditation Council in 2021 (MES 3 21 0000559592; 11/06/2021).
- **Programme 2** (Environmental Engineering, BA) as the program implemented at Georgian Technical University was accredited by The Accreditation Council in 2021 (MES 3 21 0000616039; 22/06/2021).
- **Programme 3** (Soil and Water Resources Engineering, BA) as the program implemented at Georgian Technical University was accredited by The Accreditation Council in in 2019 (#50; 26/02/2019).
- **Programme 4** Environmental Engineering, MA) as the program implemented at Georgian Technical University was accredited by The Accreditation Council in 2021 (MES 5 21 0000616040 22/06/2021).

External evaluation mechanisms at Sokhumi State University also include peer review and feedback from stakeholders, including representatives of partner or other higher education institutions, employers, students, and graduates through various survey instruments and consultation processes. In General, programmes are evaluated by employers and academic personnel, and the results of these external evaluations and stakeholder feedback are considered in the programme modification process in cooperation with the University Quality Assurance Service.

In accordance with the university regulation “Mechanisms for Evaluating Teaching Quality Development Opportunities” of Sokhumi State University, an external collegial developmental peer-review of the programs are carried out by local and international experts. In addition, the results of the survey of industry professionals, partners, and other interested parties such as alumni are taken into account. The results of the analysis of the employers' requirements are also taken into account.

Interviews with the program heads and the personnel implemented the programs revealed that educational programs have not yet been submitted by Sokhumi State University for external peer review by experts in the field.

It is recommended the University ensure systematic external collegial developmental evaluations by local and foreign experts.

Individual evaluation - An individual evaluation of the doctoral educational program or of the educational program for which a recommendation and/or advice is issued.

Description and Analysis - Programme 1 (Agricultural Engineering, BA)

See cluster description and analysis.

Description and Analysis - Programme 2 (Environmental Engineering, BA)

See cluster description and analysis.

Description and Analysis - Programme 3 (Soil and Water Resources Engineering, BA)

See cluster description and analysis.

Description and Analysis - Programme 4 (Environmental Engineering, MA)

See cluster description and analysis.

Evidences/Indicators

- Educational programs and syllabi;
- Mechanisms for Evaluating Teaching Quality Enhancement Opportunities (Resolution of Academic Council of Sukhumi State University #05/01 - 20, 20.04.2012);
- Job market research documents;
- Survey forms for graduates and employers;
- Analysis of graduates and employers' surveys for related programs,
- Interviews with representatives of university administration, academic/invited personnel and employers;
- Interviews with representatives of students and alumni from related programs;
- Decision of Accreditation Council about granting accreditation to the programs presented in cluster;
- Accreditation expert groups reports during the previous accreditation;
- Self-evaluation report presented by the Sokhumi State University.

Recommendations and Suggestions according to the programmes:	Recommendation(s): Please, write the developed recommendations that apply equally to the educational programmes grouped in the cluster. Also, please indicate, according to individual programs (if any)	Suggestion(s): Please, write the developed suggestions that apply equally to the educational programmes grouped in the cluster. Also, please indicate, according to individual programs (if any)
General recommendations/ Suggestion of the Cluster	• It is recommended the University ensure systematic external collegial developmental evaluations by local and foreign experts.	
Programme 1 (Agricultural Engineering, BA)		

Programme 2 (Environmental Engineering, BA)		
Programme 3 (Soil and Water Resources Engineering, BA)		
Programme 4 Environmental Engineering, MA)		

Evaluation

Please, evaluate the compliance of the programmes with the component

Component 5.2. External Quality Evaluation	Evaluation
Programme 1 (Agricultural Engineering, BA)	Substantially
Programme 2 (Environmental Engineering, BA)	Substantially
Programme 3 (Soil and Water Resources Engineering, BA)	Substantially
Programme 4 Environmental Engineering, MA)	Substantially

5.3. Programme Monitoring and Periodic Review

Accreditation standards indicators

Programme monitoring and periodic evaluation is conducted with the involvement of academic, scientific, invited, administrative, supporting staff, students, graduates, employers and other stakeholders through systematic data collection, study and analysis. Evaluation results are applied for the programme improvement.

Summary and Analysis of the Compliance of the Educational Programmes Grouped in a Cluster with the Requirements of the Standard Component

Cluster evaluation

Description and Analysis of Cluster

Quality Assurance Service at the university periodically monitors the quality of the development and implementation of educational programs. Based on the monitoring results, the relevant recommendations, suggestions for possible changes, and conclusions are developed for the further development of educational programs. Within the framework of the mentioned process, the Quality Assurance Office regularly checks the library's book fund (including textbooks and other educational materials in their physical condition, quantity, and compliance with the syllabi).

The Quality Assurance Office conducts questionnaire surveys for students, alumni, personnel and employers to get feedback from all interested parties and ensure the quality of educational process, educational programs and study courses implementation. It also analyses the results of peers' classroom observations. Based on the analysis of surveys, the Quality Assurance Office develops recommendations and instructions to enhance the quality of teaching and to ensure further development of programs. It also analyses the opinions and recommendations of specialists in the field and compares the existing programs with similar programs of foreign universities. Based on the analysis of such complex indicators the Quality Assurance Office assesses the efficiency of implementation of educational programs and offers recommendations and suggestions to program personnel for further development of the education programs.

The expert group identified several important challenges regarding the effectiveness and comprehensiveness of programme monitoring and evaluation processes. Although substantial information is collected through various evaluation mechanisms, the results and analytical findings are not yet systematically or fully reflected in programme development and improvement processes. It is recommended that the University ensure the monitoring process of educational programmes presented in cluster using the full spectrum of existing monitoring mechanisms.

Individual evaluation - An individual evaluation of the doctoral educational program or of the educational program for which a recommendation and/or advice is issued.

Description and Analysis - Programme 1 (Agricultural Engineering, BA)

See cluster description and analysis.

Description and Analysis - Programme 2 (Environmental Engineering, BA)

See cluster description and analysis.

Description and Analysis - Programme 3 (Soil and Water Resources Engineering, BA)

See cluster description and analysis.

Description and Analysis - Programme 4 (Environmental Engineering, MA)

See cluster description and analysis.

Evidences/Indicators

- Educational programs and syllabi;
- Mechanisms for Evaluating Teaching Quality Enhancement Opportunities (Resolution of Academic Council of Sukhumi State University #05/01 - 20, 20.04.2012);
- The Methodology of approval, planning and development of graduate programs;
- Methodology for planning, designing and development of undergraduate program
- Regulation for study process;
- Webpage of the university <https://www.sou.edu.ge/home>;
- Job market research documents;
- Programs learning outcome evaluation mechanism;
- Regulations for distance/electronic study process (Academic Council resolution № 05/01-608; 24. 03. 2020);
- Survey forms for students and personnel, graduates and employers;
- Analysis of students, graduates and personnel surveys for related programs,
- Interviews with representatives of university administration, academic/invited personnel and employers;
- Interviews with representatives of students and alumni from related programs;
- Self-evaluation report presented by the Sokhumi State University.

Recommendations and Suggestions according to the programmes:	<u>Recommendation(s):</u> Please write the developed recommendations that apply equally to the educational programmes grouped in the cluster. Also, please indicate, according to individual programs (if any)	<u>Suggestion(s):</u> Please write the developed suggestions that apply equally to the educational programmes grouped in the cluster. Also, please indicate, according to individual programs (if any)
General recommendations/ Suggestion of the Cluster	• It is recommended that the University ensure the monitoring process of educational programmes presented in cluster using the full spectrum of existing monitoring mechanisms.	
Programme 1 (Agricultural Engineering, BA)		

Programme 2 (Environmental Engineering, BA)		
Programme 3 (Soil and Water Resources Engineering, BA)		
Programme 4 Environmental Engineering, MA)		

Evaluation

Please, evaluate the compliance of the programmes with the component

Component 5.3. Programme Monitoring and Periodic Review	Evaluation
Programme 1 (Agricultural Engineering, BA)	Substantially
Programme 2 (Environmental Engineering, BA)	Substantially
Programme 3 (Soil and Water Resources Engineering, BA)	Substantially
Programme 4 Environmental Engineering, MA)	Substantially

Attached documentation (if applicable):

Signatures

Chair of Accreditation Experts Panel

Apostolos Giannis



Of the member(s) of the Accreditation Experts Panel

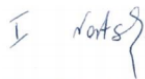
Mamuka Benashvili



Akaki Chalatashvili



Ia Natsvlishvili



Gulnazi Magradze

