IQAA

INDEPENDENT AGENCY
FOR QUALITY ASSURANCE IN EDUCATION — IQAA

REPORT
ON THE EXTERNAL AUDIT
OF BAKU STATE UNIVERSITY

PROGRAM ACCREDITATION

7005008 Chemistry of Nanomaterials

7005004 Ecological Chemistry

Astana, 2026

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LEVEL OF COMPLIANCE DEGREE OF COMPLIANCE OF THE SELF-EVALUATION REPORT WITH THE ACTUAL STATE OF THE EDUCATIONAL PROGRAM 7005008 "CHEMISTRY OF NANOMATERIALS" BY EACH STANDARD

Standards	**Indicate the degree of compliance of the self-assessment report with the actual state of affairs at the university for each standard**			
	Full compliance	**Significant compliance**	**Partial compliance**	**Non-compliance**
Standard 1 Policy on Educational Program Quality Assurance and Academic Integrity	+			
Standard 2 Development and approval of the educational program, information management		+		
Standard 3 Student-centered learning, teaching, and assessment		+		
Standard 4 Admissions, Academic Performance, Recognition, and Certification		+		
Standard 5 Faculty		+		
Standard 6 Learning Resources and Student Support	+			
Standard 7 Public Information		+		

LEVEL OF CONFORMITY OF THE SELF-EVALUATION REPORT TO THE ACTUAL STATUS OF EDUCATIONAL PROGRAM 7005004 "ECOLOGICAL CHEMISTRY" FOR EACH STANDARD

Standards	**Indicate the degree of compliance of the self-assessment report with the actual state of affairs at the university for each standard**			
	Full compliance	**Significant compliance**	**Partial compliance**	**Non-compliance**
Standard 1 Policy on Educational Program Quality Assurance and Academic Integrity	+			
Standard 2 Curriculum Development and Approval, Information Management		+		
Standard 3 Student-centered learning, teaching, and assessment	+			
Standard 4 Admissions, Academic Performance, Recognition, and Certification	+			
Standard 5 Faculty		+		
Standard 6 Learning Resources and Student Support	+			
Standard 7 Public Information		+		

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CHAPTER 1

CONTEXT AND OBJECTIVES OF THE VISIT

Introduction

On March 12–13, 2026, an expert group conducted an on-site visit to Baku State University as part of the international program accreditation process. The on-site visit was carried out in accordance with the program developed by the IQAA and agreed upon with the university. All materials necessary for the work of the external expert group (EEG)—the visit program, the self-assessment report for program accreditation, the composition of the external expert group, the list of interview participants, the guidelines for organizing and conducting the external evaluation, the expert code of ethics, and the template for the EEG's accreditation report—were provided to the members of the expert group prior to the start of their work at the educational institution, which enabled them to prepare for the external evaluation procedure in a timely manner.

The self-assessment report on the educational programs of Baku State University contains sufficient information presented in accordance with program accreditation standards, identifies strengths and weaknesses, and highlights external threats and opportunities for risk management and the university's further development.

In accordance with the EEG visit program, a visual inspection was conducted, which allowed the members of the expert group to gain a general understanding of the organization of the educational, methodological, and research processes, as well as the material and technical infrastructure, and to determine their compliance with standards. In addition, meetings were held with the university administration, vice-rectors, deans of faculties and department heads, faculty members, representatives of academic schools, undergraduate and graduate students, alumni, and employers. The experts inspected the university's structural units, the academic library, sports, recreational, and medical facilities, dining halls, and the Student Union.

During the external audit, the experts reviewed the university's regulatory documentation to gain a more detailed understanding of document management, educational and methodological, research, and logistical support, as well as the university's website, its navigation and content, and the presentation of the university's educational programs on the pages and tabs of the university's website, in the media, and on other electronic resources.

The activities planned during the external visit contributed to a more detailed understanding of the university's structure and operations and allowed external

experts to conduct an independent assessment of the self-assessment report on educational programs against the actual state of affairs at the university and program accreditation standards.

Key characteristics of the university

Full name of the educational institution: Baku State University. Year of foundation and establishment: 1919.

The mission of Baku State University is to train highly qualified, competitive in the domestic and international labor markets, and imbued with a spirit of patriotism—scientific, pedagogical, and engineering-technical personnel—based on the acquisition of fundamental knowledge and skills in innovative research in the field of interdisciplinary lifelong education and scientific research in accordance with international standards.

The University provides education at all levels of higher education, as well as pre-university and continuing education.

In the field of scientific activity, Baku State University engages in fundamental, theoretical, methodological, pedagogical, and applied scientific research, as well as the implementation of research findings into practice and the promotion of the country's industrial and innovative development.

The university's highest governing body is the Academic Council.

Baku State University comprises 16 faculties that train specialists in 55 bachelor's degree programs and 153 master's degree programs across various academic fields; 4 institutes; a well-stocked academic library; 21 scientific, methodological, and practical journals published by the university; as well as a university clinic serving the university's faculty, staff, and students.

Baku State University has a well-developed and functional infrastructure that meets modern standards. The university has four academic buildings equipped with lecture halls and computer labs featuring state-of-the-art technical equipment. All university buildings are connected to a single corporate computer network, ensuring their integration into a shared information space. The university library, equipped with electronic reading rooms and providing free Internet access, creates the necessary conditions for the effective organization of students' academic and research activities. The educational television studio provides additional opportunities for implementing innovative forms of organizing the educational process.

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CHAPTER 2
EXTERNAL AUDIT REPORT BY THE EXPERT GROUP

Introduction

The external audit of the educational programs **"7005008 – Chemistry of Nanomaterials"** and **"7005004 – Ecological Chemistry"** at Baku State University was conducted as part of the international program accreditation procedure organized by the Independent Agency for Quality Assurance in Education (IQAA). The external expert group's visit took **place on March 12–13**, **2026**, in accordance with the audit program approved by the IQAA and agreed upon with the university.

Prior to the visit, members of the external expert group (EEG) were provided with all necessary documentation, including the self-assessment report of the educational program, supporting appendices, the visit schedule, and methodological recommendations for conducting the accreditation procedure. This preliminary preparation allowed the experts to analyze the institutional context, understand the structure and objectives of the educational program, and identify key aspects requiring further examination during the audit.

During the on-site visit, the expert panel conducted a comprehensive evaluation of the educational program, paying particular attention to its compliance with the program accreditation standards established by the IQAA. The evaluation included an analysis of the self-assessment report, a review of supporting documentation, and a visual inspection of the university's educational and research infrastructure. Meetings and interviews were also held with university leadership, faculty, administrative staff, students, alumni, and employer representatives. These discussions provided valuable insights into the organization of the educational process, research activities, and the practical implementation of quality assurance mechanisms at the university.

The expert group examined the structure of the educational program, the content of the curriculum, teaching and assessment methods, faculty qualifications, educational resources, as well as mechanisms for ensuring academic integrity and the quality of education. Particular attention was paid to the extent to which the educational program at meets national requirements for higher education and aligns with international academic standards.

Founded in 1919, Baku State University is one of the leading higher education institutions in the Republic of Azerbaijan and plays a vital role in the development of scientific research and higher education in the country. The university offers education at all levels of higher education and conducts fundamental and applied research across a wide range of scientific disciplines. Its academic structure includes numerous faculties and research units that support the development of interdisciplinary academic programs.

The educational programs **“Chemistry of Nanomaterials”** and **“Ecological Chemistry”** are designed to train highly qualified specialists capable of conducting scientific research and applying modern nanotechnological, environmental, and analytical methods in various scientific and industrial fields. The program combines theoretical knowledge with practical, research-oriented training, thereby developing the competencies required in today’s scientific and technical environment.

Based on an analysis of the submitted documentation, interviews conducted during the external visit, and an inspection of the university’s infrastructure and educational resources, the expert panel conducted an independent assessment of the self-assessment report’s alignment with the actual state of the educational program and the accreditation standards established by the IQAA.

The following sections of this report present the results of the expert evaluation for each accreditation standard, including an analysis based on factual data, the identification of best practices, and comments and recommendations for further improving the quality and effectiveness of the educational program.

Standard 1. Educational Program Quality Assurance Policy and Academic Integrity

Analysis and Evidence Base:

Baku State University (BSU) has established a comprehensive institutional framework aimed at ensuring the quality of educational programs and maintaining academic integrity. The university operates in accordance with national legislation, including the laws of the Republic of Azerbaijan "On Education" and "On Science," as well as the University Charter, which define the governance structure and responsibilities related to academic quality management.

The key regulatory document supporting quality assurance processes is the "Policy and Standards for Quality Assurance in Education at BSU," approved by a decision of the Academic Council in 2021. This policy defines the fundamental principles, objectives, and operational mechanisms for monitoring and improving the quality of educational, research, and administrative processes. The policy is integrated into the university's strategic management system and operates in coordination with the Strategic Development Plan, academic policy, and internal quality assurance standards.

The implementation of the quality assurance policy is supported by a number of institutional structures, including the Quality Assurance Center, the Center for Educational Organization and Management, the Center for Scientific Activity and Innovation, as well as administrative units at the faculty level. These structures conduct regular monitoring, evaluation, and professional development activities to ensure the continuous improvement of educational programs.

Academic integrity is ensured through a clearly defined institutional mechanism. Since 2017, the university has been using the international anti-plagiarism system Strike Plagiarism to evaluate academic works, including bachelor's, master's, and doctoral theses, as well as course materials. In addition, the university has implemented procedures to detect the use of artificial intelligence in academic texts. The Anti-Plagiarism Commission operates pursuant to the rector's order and is responsible for evaluating similarity reports, identifying potential violations of academic ethics, and providing official conclusions for thesis defense procedures.

Specific thresholds for plagiarism and AI-generated content have been established for various types of academic work, demonstrating a structured and transparent academic integrity policy. The system also includes a two-stage evaluation process consisting of automated analysis and expert review by the Anti-Plagiarism Commission. Such procedures contribute to the reliability and credibility of the research results produced at the university.

In addition, the university promotes transparency in the educational process through digital learning platforms such as Blackboard and the System for Managing

Scientific and Pedagogical Activities (SEMS), which provide students with access to curricula, assignments, and assessment criteria. These mechanisms facilitate open access to academic information and support a transparent learning environment.

Overall, an analysis of the self-assessment report and supporting documents shows that BSU has established an institutional culture of quality assurance and academic integrity, supported by a regulatory framework, digital infrastructure, and operational monitoring mechanisms.

The Master's degree program in "Ecological Chemistry" is implemented within the institutional quality assurance system of Baku State University (BSU), which operates in accordance with national legislation and internal regulatory documents governing activities in the field of higher education.

The quality assurance policy is defined by approved internal regulations and standards governing the development, monitoring, and evaluation of educational programs.

The program is developed and managed by the Faculty of Chemistry in accordance with the university's strategic priorities and academic policy. The formulation of learning outcomes, the structure of the curriculum, and the mapping of competencies reflect compliance with the national qualifications framework and ECTS requirements. The educational process combines theoretical classes, laboratory work, research activities, and the preparation of a master's thesis, ensuring systematic academic monitoring and the achievement of planned learning outcomes.

Academic integrity is ensured through institutional mechanisms regulating the prevention of plagiarism, ethical conduct, and transparency in research activities. Master's theses and academic papers are subject to plagiarism checks in accordance with university regulations. Students are made aware of clear requirements regarding originality, citation practices, and responsible conduct of research. The implementation of such procedures contributes to maintaining academic integrity and preventing academic misconduct.

Program documentation indicates that quality assurance mechanisms include periodic review of curricula, monitoring of student performance, involvement of academic and teaching staff in discussions of quality issues, and consideration of recommendations from stakeholders. Internal evaluation procedures comply with institutional quality standards and are aimed at the continuous improvement of the educational process.

Overall, the "Ecological Chemistry" program operates within a structured and regulated quality assurance system that promotes transparency, accountability, and compliance with accreditation requirements.

Best Practice:

One of the notable best practices of the educational program "7005008 – Chemistry of Nanomaterials" is the implementation of a systematic anti-plagiarism mechanism combined with AI-based detection tools for evaluating academic work.

The establishment of clear similarity thresholds and a two-step verification process increase transparency and help prevent academic misconduct.

Another best practice of the educational program "7005008 – Chemistry of Nanomaterials" is the integration of digital learning management systems, such as Blackboard and SEMS, which allow students to access course materials, assessment criteria, and academic information, thereby promoting transparency and accountability in the educational process.

The "Ecological Chemistry" program demonstrates that its curriculum structure, learning outcomes, and competency requirements align with national standards and the institution's academic policies. The integration of laboratory research and thesis preparation into the quality assurance system reinforces academic rigor and scientific integrity.

Established institutional procedures for combating plagiarism and ethical oversight ensure adherence to the principles of academic integrity and promote the development of responsible research practices among master's students.

Areas for improvement:

For the educational program "7005008 – Chemistry of Nanomaterials," the expert group recommends that the university further strengthen its quality assurance system by:

- expanding analytical reporting on the results of plagiarism and academic integrity monitoring;
- introducing regular training and awareness-raising programs on academic ethics for students and faculty;
- improving the integration of internal quality assurance results into curriculum development and program improvement processes.

For the educational program "7005004 – Ecological Chemistry," it is recommended to further formalize documentation demonstrating how stakeholder feedback is systematically analyzed and taken into account during periodic updates to the "Ecological Chemistry" program. An additional presentation of the summarized results of the internal review at the program level would enhance the transparency of the quality assurance process.

Compliance level for Standard 1 (7005008 – Chemistry of Nanomaterials) – Full compliance

Level of compliance with Standard 1 (7005004 – Ecological Chemistry) – full compliance

Standard 2. Development and Approval of the Educational Program, Information Management

Evidence and analysis

The curriculum "7005008 – Chemistry of Nanomaterials" at Baku State University has been developed and is implemented in accordance with national standards in higher education and the university's academic policy. The program meets the requirements of Azerbaijan's National Qualifications Framework and follows the European Credit Transfer and Accumulation System (ECTS), ensuring compatibility with international higher education standards and promoting academic mobility.

The development and approval of educational programs at the university are regulated by institutional governing bodies, including the Scientific Council, faculty academic councils, and relevant academic departments. These bodies participate in the development, review, and approval of curriculum content, ensuring that educational programs align with national standards and the institution's strategic goals. The curriculum development process includes the preparation of syllabi, the definition of learning outcomes, and their alignment with the professional competencies required in the relevant field of study.

The program structure demonstrates the integration of modern scientific knowledge and technological developments in the field of nanomaterial chemistry. The curriculum includes specialized courses aimed at developing theoretical knowledge and practical skills related to the synthesis, characterization, and application of nanomaterials. For example, the course "Nanoscale Synthesis Technologies" provides students with knowledge of the mechanisms of nanoparticle synthesis, top-down and bottom-up approaches, as well as modern synthesis methods such as sol-gel, hydrothermal, and microemulsion methods. The course syllabus clearly defines learning outcomes, teaching methods, and assessment approaches.

The university also maintains an information management system that ensures the transparency and accessibility of educational information. Digital platforms such as Blackboard and the System for Managing Scientific and Pedagogical Activities (SEMS) allow students to access course materials, syllabi, assessment criteria, and academic records. These systems facilitate the management and dissemination of academic information and ensure equal access for all students.

In addition, the educational program is supported by internal quality assurance mechanisms that periodically review the relevance and effectiveness of the curriculum. Faculty and administrative units participate in monitoring the implementation of the curriculum and updating educational content in line with scientific and technological advancements.

However, the self-assessment report contains limited information on the systematic involvement of external stakeholders, such as employers and industry representatives, in the curriculum development process. Furthermore, more detailed information on the procedures for periodically reviewing and updating the curriculum would further enhance the transparency of the curriculum development process.

Overall, the analysis shows that the university has established institutional mechanisms for curriculum development and information management, although

certain aspects related to stakeholder engagement and continuous improvement of curricula could be strengthened.

The educational program for "7005004 – Ecological Chemistry" has been developed and is being implemented in accordance with the laws of the Republic of Azerbaijan "On Education" and "On Science," as well as state standards and decisions of the Cabinet of Ministers and the Ministry of Science and Education. The program aligns with BSU's Strategic Development Plan and supports the university's mission to provide high-quality education based on scientific principles and modern requirements.

The master's program is designed to train qualified specialists in the field of environmental chemistry, capable of studying environmental pollution, analyzing ecotoxic substances, and applying modern methods of environmental protection and restoration. Learning outcomes are developed in accordance with the National Qualifications Framework and reflect the needs of the labor market. They are clearly defined and accessible to students and stakeholders.

The duration of the program is 2 years. The program is based on a credit system and ECTS principles. One credit corresponds to 30 hours of coursework, and a total of 120 credits must be earned to receive a degree. Each academic year comprises 60 credits. Within the program, 12 credits are allocated to internships and 18 credits to the master's thesis, which strengthens practical and research skills. Of the total number of credits, 18 are determined by the Ministry of Science and Education, and 72 by the university through required and elective courses. The learning outcomes matrix ensures that courses align with professional competencies.

Practical training is organized both at BSU and at external institutions in accordance with the curriculum. The organization of internships is supported by cooperation agreements. The department has teaching laboratories equipped with modern instruments and devices for environmental monitoring and analysis. The program also applies the principles of inclusive education and provides support to students with special educational needs.

Teaching on the program is carried out by qualified faculty, including 3 professors, 6 associate professors, and 3 senior lecturers. Between 2018 and 2024, faculty members developed 28 teaching materials and regularly participated in professional development activities. The courses are accompanied by syllabi and teaching materials.

Program information is managed through the systematic collection and analysis of data. Over the past six years, 36 students have been admitted, and 13 students are currently enrolled for the 2025–2026 academic year. The average GPA of graduates over the past five years ranges from 86 to 93. Student satisfaction is tracked through anonymous surveys, and more than 90% of master's students participate in conferences and academic events. Graduate employment rates are also tracked, with the rate reaching 100% in recent years. Feedback channels, including

the "Message to the Rector" system and suggestion boxes, ensure open communication.

Overall, the "Ecological Chemistry" program has been developed and is implemented in accordance with national standards, supported by qualified staff, modern laboratories, a structured credit distribution system, and regular monitoring of student and graduate learning outcomes.

Best practices:

A positive aspect of the "7005008 – Chemistry of Nanomaterials" educational program is the clear structure of course curricula, which include specific learning outcomes, teaching methods, and assessment procedures. This structure promotes transparency and ensures that students understand the academic expectations of each course.

Another positive practice of the "7005008 – Chemistry of Nanomaterials" program is the implementation of digital academic information systems, such as Blackboard and SEMS, which facilitate access to course materials, assessment criteria, and academic information, contributing to the creation of an organized and transparent learning environment.

The "7005004 – Ecological Chemistry" program is clearly aligned with national standards and BSU's strategic plan. The ECTS-based structure, clear credit allocation (including credits for internships and the thesis), and the learning outcomes matrix ensure clarity and consistency. Practical training is supported by cooperation agreements and well-equipped laboratories. Student learning outcomes, student satisfaction, and graduate employment are regularly monitored.

Note:

Although the university has established procedures for the development and approval of curricula, the available documentation contains limited information on the involvement of external stakeholders and industry representatives in the development and revision of curricula. Strengthening cooperation with employers and professional organizations could further improve the program's alignment with labor market demands.

Areas for improvement:

The expert group recommends that the university:

- intensify the systematic involvement of employers and external experts in the process of developing and revising curricula;
- introduce procedures for the regular periodic evaluation of curricula based on feedback from students, graduates, and employers;
- continue to develop data-driven mechanisms for improving curricula, using information obtained through quality assurance monitoring and graduate employment indicators.
- It is recommended to more clearly demonstrate how survey results and employment data lead to specific changes in the curriculum.

Level of compliance with Standard 2 *(*"7005008 – Chemistry of Nanomaterials," "7005004 – Ecological Chemistry") – significant compliance

Standard 3. Student-centered learning, teaching, and assessment

Evidence and Analysis

Baku State University applies a student-centered approach to teaching and learning within the "7005008 – Chemistry of Nanomaterials" educational program. The educational process is organized in accordance with modern pedagogical principles that promote active student participation, independent learning, and the development of analytical and research skills.

The curriculum includes clearly defined learning outcomes, teaching methods, and assessment criteria, which are communicated to students through course syllabi and digital learning platforms. Each course syllabus specifies the course objectives, expected competencies, assessment methods, and the relationship between learning outcomes and professional competencies. This structure ensures that students understand the requirements and expected outcomes of their studies.

Teaching methods used in the program include lectures, interactive discussions, presentations, group work, research assignments, and debates. These approaches encourage students to actively participate in the learning process, develop critical thinking skills, and apply theoretical knowledge to practical situations. Particular emphasis is placed on interactive teaching methods that allow students to engage in problem-solving activities and collaborate in a shared learning environment.

The assessment methods within the program are designed to evaluate both theoretical knowledge and practical competencies. Student performance is assessed based on a combination of assignments, presentations, independent projects, and exams. The curriculum also includes independent research assignments and project-based tasks that help students develop research and analytical skills relevant to the field of nanomaterials chemistry.

In addition, the university uses digital learning platforms, such as Blackboard and the System for Managing Educational and Research Activities (SEMS), to provide students with access to course materials, assignments, and assessment results. These systems promote transparency in assessment and ensure that students have continuous access to academic resources and feedback throughout the learning process.

Despite these positive aspects, the self-assessment report contains limited information on systematic mechanisms for collecting and analyzing student feedback on the quality of teaching and the effectiveness of the curriculum. Although interactive teaching methods are described in the course documentation, additional evidence of formal consideration of student feedback in curriculum improvement processes would strengthen the student-centered approach.

Overall, the analysis shows that the educational program demonstrates the implementation of student-centered teaching and learning methods, as well as transparent assessment procedures, although additional data on structured feedback mechanisms and continuous improvement processes could enhance the system's effectiveness.

The educational process for the specialty "7005004 – Ecological Chemistry" is organized in accordance with the principles of student-centered learning. This means that students are at the center of the educational process, and their academic interests, professional goals, and personal development are taken into account. The program complies with the Bologna Process, ESG standards, and the Law of the Republic of Azerbaijan "On Education," which protects students' rights and ensures their active participation in education.

The program is based on clearly defined learning outcomes and professional competencies. Its effectiveness is assessed by how well students develop their knowledge, practical skills, and professional abilities. Instruction combines theoretical classes, laboratory work, and research projects. Particular attention is paid to laboratory practice and the study of environmental chemical processes, which helps students apply analytical methods to real-world environmental problems.

Students can choose elective courses and research topics under the guidance of academic advisors. At the beginning of the academic year, they receive information about course content and requirements. Students can communicate directly with instructors and academic advisors. Feedback on the quality of teaching and learning conditions is collected through surveys and discussions to ensure continuous improvement.

Faculty members serve as mentors and advisors, not merely as lecturers. They help students develop critical thinking skills, analyze environmental data, interpret laboratory results, and draw scientific conclusions. Students conduct independent research, study scientific literature, perform experiments, and present their findings. Faculty provide methodological and research support throughout this process.

Equal opportunities are provided for all students. Academic advising, laboratory mentoring, and psychological support services are available. The use of both in-person and digital learning formats ensures flexibility in conducting laboratory research, fieldwork, and environmental analysis.

Master's students conduct research on topics such as toxic substances in water and soil, pesticide analysis, air quality monitoring, industrial wastewater analysis, and environmental pollution control. This practical focus reinforces the program's research-oriented nature.

Relationships between students and faculty are based on mutual respect and ethical standards. Students are expected to adhere to academic regulations and attend classes regularly, while faculty respect students' opinions and support their academic development.

An important element of academic planning is the Individual Study Plan (ISP). The ISP includes selected courses, the number of credits, and the distribution

across semesters. In the first year, the IEP is prepared by faculty members and provided to students by September 10. In subsequent years, students prepare their own IEPs between July 5 and 15 and may make changes to them until September 10. The IEP is approved before the start of the academic year and is kept on file at the university. This system allows students to plan their academic and research activities in advance.

Teaching methods include problem-based learning, project work, group discussions, presentations, laboratory sessions, and simulations. Practical sessions help students apply theoretical knowledge, develop analytical skills, and prepare for professional practice.

Assessment is organized in a clear and transparent manner. Students are evaluated based on seminar work, colloquia, individual assignments, laboratory work, and written exams. Seminar courses are graded according to a set grading scale, and term papers are taken into account when determining the final grade. Final exams are primarily written and include both theoretical questions and questions related to the student's specialization. The final grade for the course is calculated based on semester assignments and exam results, with a maximum total score of 100. A minimum total score is required to pass the course.

If students disagree with their grades, they may submit a written appeal within two days. The Appeals Committee reviews the case, and its decision, approved by the rector, is final. Students may also submit written or electronic suggestions and appeals directly to the department or to the Rector's Office at . All submitted materials undergo an official review and receive a response.

Overall, the "Ecological Chemistry" program applies the principles of student-centered learning, modern teaching methods, structured academic planning, transparent assessment procedures, and regulated appeal mechanisms in accordance with national and European quality standards.

Best practice:

One of the positive practices of the "7005008 – Chemistry of Nanomaterials" program is the use of diverse and interactive teaching methods, including discussions, presentations, and research assignments, which encourage active student participation in the learning process.

Another positive aspect of the "7005008 – Chemistry of Nanomaterials" program is the clear definition of learning outcomes and assessment procedures in course syllabi, which increases transparency and allows students to better understand academic expectations and assessment criteria.

The "7005004 – Ecological Chemistry" program provides a balanced combination of theoretical instruction, laboratory work, and independent research, strengthening professional competencies in the field of environmental chemistry. A clear 100-point grading system with a clear distribution between semester grades and the final grade enhances transparency and objectivity.

Systematic monitoring of student performance indicators and the results of thesis defenses for the "7005004 – Ecological Chemistry" program contributes to

the continuous improvement of the educational process. The integration of research-oriented learning through the preparation of a master's thesis significantly enhances analytical and practical competencies.

Comments:

Although student-centered teaching methods are used in the "7005008 – Chemistry of Nanomaterials" educational program, the documentation contains limited information on formal procedures for collecting and analyzing student feedback regarding the quality of teaching and the effectiveness of courses. Strengthening such mechanisms would further enhance the student-centered nature of the educational process.

Areas for improvement:

The expert group recommends the following for the educational program "7005008 – Chemistry of Nanomaterials":

- establish systematic procedures for collecting student feedback on the quality of teaching and the content of educational programs;
- strengthen mechanisms for incorporating student feedback into curriculum improvement processes;
- further develop student participation in curriculum evaluation and decision-making processes.

It is recommended for the educational program "7005004 – Ecological Chemistry" to expand quantitative analytical reporting on trends in student performance, including comparative data across academic years, to strengthen the evidence base for program evaluation mechanisms.

Further development of international scientific exchange and opportunities for joint dissertation supervision in the educational program "7005004 – Ecological Chemistry" could further strengthen student-centered academic development.

Level of compliance with Standard 3 (7005008 – Chemistry of Nanomaterials) – significant compliance

Level of compliance with Standard 3 (7005004 – Ecological Chemistry) – full compliance

Standard 4. Student Admission, Academic Performance, Recognition, and Certification

Evidence and analysis based on criteria

Procedures related to student admission, monitoring of academic performance, recognition of learning outcomes, and certification at Baku State University are governed by national legislation in the field of higher education and the institution's academic policy. Admission to the educational program "7005008 – Chemistry of Nanomaterials" is conducted through a centralized admission system

organized by the State Examination Center of the Republic of Azerbaijan. This system ensures transparency, fairness, and equal access for applicants applying to higher education programs.

The university employs a structured academic management system to monitor student performance throughout the educational process. Student academic performance is assessed using a grade point average (GPA) system in accordance with the European Credit Transfer and Accumulation System (ECTS). This system allows the university to track academic achievements and ensures compatibility with international educational standards.

Academic performance monitoring is supported by institutional digital systems, including the System for Managing Educational and Research Activities (SEMS) and the Blackboard platform, which provide students with access to course materials, assignments, grades, and assessment results. These platforms promote transparency in the assessment process and allow students to track their academic progress throughout the semester.

The university also follows formal procedures for recognizing and certifying academic achievements. Students who successfully complete the program requirements receive officially recognized diplomas in accordance with national education laws. The certification process includes the successful completion and defense of a final thesis, as well as meeting the academic requirements specified in the curriculum.

In addition, mechanisms to ensure academic integrity are applied to theses through the use of anti-plagiarism systems and evaluation procedures carried out by the Anti-Plagiarism Commission. These procedures help maintain academic standards and ensure the integrity of students' research work.

However, the self-assessment report contains limited information on certain aspects related to student mobility, recognition of prior learning, and mechanisms for international credit transfer. Additional evidence demonstrating the systematic implementation of these processes would further strengthen the transparency and effectiveness of student admission and recognition procedures.

Overall, the available documentation indicates that the university has established transparent and structured mechanisms for student admission, monitoring of academic performance, and certification. At the same time, further development of recognition procedures and mechanisms for international academic mobility could enhance the overall effectiveness of the system.

Admission to the master's program in the educational program "7005004 – Ecological Chemistry" at Baku State University is conducted in strict accordance with the legislative framework of the Republic of Azerbaijan, including the Law "On Education," relevant resolutions of the Cabinet of Ministers, the "Rules for Admission to Master's Programs at Higher Education Institutions of the Republic of Azerbaijan," approved by Resolution No. 40 of February 8, 2017, as well as the rules established by the State Examination Center (SEC). A unified legal framework ensures equal conditions for applicants, guarantees fairness in evaluation, and maintains the transparency of the selection process. Each academic year, the SEC

approves the admission procedures and publicly announces them through official channels. The admission process is conducted on a fully open and transparent basis.

All exam results are recorded in the SEC's electronic database, and admission to higher education institutions is determined based on accumulated scores. The electronic system eliminates the possibility of external interference and enhances transparency. Admission quotas for the "Ecological Chemistry" program are determined annually by agreement between the Ministry of Science and Education and BSU, which forms the legal basis for a sustainable admission policy.

Statistical indicators confirm the stability of student enrollment. Over the past six years, a total of 36 students have been admitted to the program, and the enrollment rate for allocated spots has reached 100 percent. This full utilization of planned quotas reflects sustained demand for this specialization and effective institutional planning. The stability of student enrollment is linked to the demand for environmental chemistry in the labor market and the university's strong research and laboratory infrastructure.

Upon admission, master's students receive comprehensive information about the curriculum, course offerings, academic regulations, assessment procedures, and the stages of the educational process. Orientation sessions organized by the Department of Ecology and Soil Science familiarize students with the university's structure, academic advising mechanisms, digital platforms, and available support services. Additional orientation training is provided by the Psychological Support Unit, which facilitates academic and social integration.

Throughout the educational process, academic performance is systematically tracked via the university's electronic database. All completed courses, earned credits, exam results, and grade point averages are recorded digitally. Academic advisors regularly inform students about their academic performance and provide recommendations. If low academic performance is identified, targeted academic support mechanisms and corrective action plans are initiated. Quantitative performance indicators over the past five years demonstrate stable and high academic results.

Students with academic deficiencies are provided with structured opportunities to address them. In the event of unsatisfactory grades, students have the right to retake exams. Procedures for reinstatement and academic leave are governed by Resolution No. KQ-02 of the Board of the Ministry of Science and Education dated February 21, 2024. All applications related to transfer, reinstatement, academic leave, or return from leave are processed digitally through the Centralized Education Information System (CEIS), ensuring efficiency and transparency. Reinstatement is permitted within fifteen years of the date of dismissal, and is processed in accordance with the semester of dismissal. Academic leave may be granted for compulsory military service, for family reasons for up to two years, for health reasons for up to two years, as social leave in accordance with the law, or for self-funded study abroad for up to one year.

Academic mobility is carried out in accordance with the rules of the national credit system. Accumulating credits at another educational institution is possible

with the consent of BSU ( ), provided that the number of recognized credits does not exceed 30 percent of the specialization program. Mobility documentation includes an academic transcript, a student application, a learning agreement, and an information package. This standardized structure ensures academic consistency and comparability.

Each master's student develops an individual study plan in collaboration with their academic advisor. The plan outlines the courses to be taken, research objectives, stages of dissertation preparation, participation in conferences and seminars, as well as requirements for interim and final assessments. The department regularly monitors the implementation of the individual plan, which can be updated as needed, thereby promoting the systematic development of research activities.

Assessment is conducted in accordance with state regulations. Students who successfully complete the curriculum and defend their thesis before a specialized examination committee are awarded a master's degree. The diploma is issued in accordance with the state-approved procedure. A successful defense confirms the achievement of the program's learning outcomes and professional competencies.

Data on graduate employment indicate a high level of integration into the labor market. Graduates in the specialty of "Ecological Chemistry" work at the Institute of Petrochemical Processes of the National Academy of Sciences, the Agricultural Training Center under the Ministry of Agriculture, and the Food Safety Agency, contributing to environmental monitoring and regulatory functions. These results confirm the program's practical focus and professional relevance.

Overall, admission procedures, academic oversight mechanisms, mobility rules, reinstatement and support systems, as well as certification processes are regulated by law, managed using digital technologies, statistically stable, and compliant with national higher education standards.

Best practices:

A positive aspect of the educational program "7005008 – Chemistry of Nanomaterials" is the implementation of a centralized and transparent admissions system, which ensures fairness and equal access for applicants entering the university.

Another positive practice of the "7005008 – Chemistry of Nanomaterials" program is the use of digital learning management systems, which allow students to track their progress, access learning materials, and receive timely information about their academic achievements.

The "7005004 – Ecological Chemistry" program demonstrates steady demand: in recent years, all spots in the program have been filled. Academic performance remains consistently high. The CEIS digital system ensures transparency in admission procedures, reinstatement, and transfers between educational institutions. Clear rules for credit recognition and structured individual study plans contribute to ensuring the quality of education and academic supervision. The employment of graduates in scientific and government institutions confirms the program's significance.

Comments:

Although the university has established clear procedures for student admission and monitoring of academic performance, the documentation for the educational program "7005008 – Chemistry of Nanomaterials" contains limited information on international student mobility programs, credit recognition procedures, and the recognition of prior learning.

Areas for improvement:

The expert group recommends the following for the educational program "7005008 – Chemistry of Nanomaterials":

- strengthen mechanisms for the recognition of prior learning and international credit transfer;
- expand opportunities for student academic mobility and participation in international exchange programs;
- improve documentation and reporting regarding student academic performance, graduation statistics, and employment outcomes.

Further expansion of the enrollment of international students in the educational program "7005004 – Ecological Chemistry" would strengthen internationalization indicators. More active participation in international academic mobility programs could enhance the level of comparative academic exchange.

Level of compliance with Standard 4 (Educational Program "7005008 – Chemistry of Nanomaterials") – significant compliance

Level of compliance with Standard 4 (Educational Program "7005004 – Ecological Chemistry") – full compliance.

Standard 5. Faculty

Evidence and analysis based on criteria

The "7005008 – Chemistry of Nanomaterials" educational program at Baku State University is supported by qualified academic staff who engage in teaching, research, and academic supervision activities. The university operates within a structured academic governance system, where faculty recruitment, professional development, and academic responsibilities are regulated by institutional policies and national legislation in the field of higher education.

Faculty members involved in the educational program are responsible for delivering lectures, supervising students' research projects, and participating in the development of curricula and academic quality assurance processes. The university encourages the integration of teaching and research activities, which allows faculty members to incorporate the latest scientific achievements into the educational process and contribute to the development of students' research competencies.

The university also encourages faculty members to participate in research, conferences, and publishing activities. Research outputs, including articles, conference papers, and teaching materials, are subject to institutional monitoring mechanisms and quality control procedures. These processes contribute to the development of academic expertise and support the research-oriented nature of the educational program.

In addition, the university implements mechanisms to ensure academic integrity, which also apply to faculty members' research activities. Research papers prepared by faculty and researchers are checked for plagiarism, which helps ensure the reliability and originality of research outcomes.

The faculty participates in the implementation of modern educational approaches, including interactive teaching methods and research-oriented learning. Faculty members also supervise students' independent projects, assist with research assignments, and guide the preparation of theses, which contributes to the development of students' analytical and research skills.

However, the self-evaluation report contains limited quantitative information on the distribution of faculty workload, indicators of publication activity, and international scientific collaboration. More detailed data regarding faculty qualifications, their research productivity, and professional development programs would strengthen the overall assessment of the faculty within the educational program.

Overall, the analysis shows that the educational program relies on qualified academic staff and institutional mechanisms for monitoring academic performance, although additional data regarding faculty development and international research activities would further strengthen the program.

At the university, the personnel policy for the educational program "7005004 — Ecological Chemistry" is implemented in accordance with the Labor Code of the Republic of Azerbaijan, the Law "On Education," the University Charter, and other national regulations. The policy covers issues of hiring, promotion, performance evaluation, professional development, and termination of employment. All procedures are carried out within a clear legal framework to ensure transparency, fairness, and effective personnel management.

The faculty plays a key role in maintaining the quality of education. Their qualifications, teaching skills, and research activities directly influence student learning outcomes. The recruitment of professors and instructors is conducted through an open competition in accordance with national regulations. Job openings are publicly announced, and candidates are selected based on academic degrees, professional experience, teaching competence, and scholarly publications. Appointments are typically for a fixed term, and employment contracts are concluded in accordance with labor laws.

The Department of Ecological Chemistry has a strong research team. It consists of experienced professors, associate professors, and instructors holding advanced degrees in chemistry and related disciplines. Over the past five years, the size of the faculty has remained stable. Most faculty members hold a Candidate of

Sciences or Doctor of Sciences degree, and all possess significant experience in teaching and research. This stable and qualified faculty ensures the effective implementation of the “Ecological Chemistry” program.

Faculty members are actively engaged in research. Between 2020 and 2025, they published 58 research articles, including in journals indexed in Scopus and Web of Science. Some publications appeared in prestigious international journals. Faculty members also participate in national and international grant projects, conferences, and scientific events. Research findings—including studies on environmental pollution and heavy metal analysis—are integrated into the curriculum, strengthening the link between science and education.

Professional development is encouraged. Faculty members regularly attend training programs, seminars, and workshops focused on modern laboratory equipment, sustainable development, and innovative teaching methods. National-level agreements, including those with international publishers, provide researchers with free access to high-quality journals and support open-access publishing. This enhances the international visibility of their research.

Each faculty member develops an annual individual work plan that includes teaching load, research activities, instructional development, and student mentoring. At the end of the academic year, a report is submitted, and the results of the work are evaluated. The quality of teaching is assessed based on student feedback, analysis of teaching materials, open classes, and analysis of student performance. Research activity is evaluated based on publications, conference participation, and project involvement. Ethical conduct is governed by the national Code of Ethical Conduct for Faculty, which promotes respect, fairness, and academic integrity.

Survey results indicate positive feedback from students. Most master’s students report receiving regular support from their academic advisors, and more than half rate the quality of lectures and seminars as very high. Faculty members also receive support from the university in publishing teaching materials and methodological guidelines, which contributes to the further improvement of the educational process.

Overall, the Department of Ecological Chemistry has a stable, qualified faculty that is actively engaged in research. Clear hiring procedures, continuous professional development, regular performance evaluations, and close integration with research activities ensure the high quality of the educational program.

Best practices:

A positive aspect of the educational program “7005008 – Chemistry of Nanomaterials” is the integration of teaching and research activities, which allows faculty to incorporate modern scientific achievements into the educational process and engage students in research-oriented learning.

Another positive practice of the educational program “7005008 – Chemistry of Nanomaterials” is the institutional monitoring of scientific output, including plagiarism detection procedures applied to academic publications and research papers.

The department has a qualified and experienced faculty selected through transparent procedures. Faculty members are actively engaged in research, publish in indexed journals, and integrate research findings into the teaching process. Professional development, annual work plans, open classes, and feedback from students ensure continuous quality improvement.

Note:

Although the university demonstrates the presence of qualified academic staff, the available documentation for the educational program "7005008 – Chemistry of Nanomaterials" contains limited detailed information on faculty research productivity, international collaboration, and professional development activities.

Areas for improvement:

The expert group recommends the following for the educational program "7005008 – Chemistry of Nanomaterials**":**

- provide more detailed statistical data on faculty qualifications, research productivity, and publication metrics;
- expand opportunities for international academic cooperation and joint research projects;
- strengthen professional development programs and training opportunities for academic and teaching staff.

For the educational program "7005004 – Ecological Chemistry," the number of publications in high-impact-factor journals could be increased. More active involvement of young researchers and participation in international projects would contribute to further strengthening development.

Level of compliance with Standard 5 (OP "7005008 – Chemistry of Nanomaterials") – significant compliance

Level of compliance with Standard 5 (Program "7005004 — Ecological Chemistry") — significant compliance

Standard 6. Learning Resources and Student Support

Evidence and Analysis

Baku State University has a well-developed infrastructure and a wide range of educational resources that ensure the effective implementation of the educational program "7005008 – Chemistry of Nanomaterials ." The university has established a comprehensive material and technical base that meets modern educational requirements and creates favorable conditions for both teaching and research activities.

The university has several academic buildings equipped with lecture halls, laboratories, and computer labs, which allows for the effective organization of educational and research processes. Computer labs with modern technological

equipment and Internet access provide students with opportunities to use digital resources and scientific databases for their studies and research activities.

In addition, the university operates an extensive academic library with a rich collection of scholarly literature and electronic resources. Reading rooms equipped with access to digital databases and the Internet facilitate students' independent study and research activities. Access to these resources contributes to the development of students' academic and research competencies.

Digital learning platforms also play an important role in supporting the educational process. The university uses platforms such as Blackboard and the System for Managing Educational and Research Activities (SEMS), which provide students with access to learning materials, course syllabi, assignments, and academic records. These systems enhance the accessibility of educational information and facilitate transparent communication between students and faculty.

Student support services are also provided through various institutional structures, including academic departments, faculty administration, and specialized university centers. These units assist students with planning their studies, research activities, and professional development. The university also organizes career-related events, such as career fairs and collaborations with the State Employment Agency, to support students' transition from education to the labor market.

The availability of modern infrastructure, digital educational platforms, and academic support services demonstrates that the university provides an adequate learning environment for students enrolled in the "Nanomaterials Chemistry" program.

Overall, the analysis shows that the university has established sufficient educational resources and student support mechanisms that contribute to the effective implementation of the educational program and support students' academic and professional development.

Baku State University provides the necessary educational resources and student support services to ensure the effective implementation of the master's program under educational program code "7005004 – Ecological Chemistry." The Department of Ecological Chemistry has specialized classrooms and laboratories that facilitate both theoretical instruction and practical training. Three classrooms are used for lectures, seminars, and laboratory sessions; they are equipped with computers, projectors, and other ICT tools necessary for modern education.

The department has three teaching laboratories equipped with modern instruments, reagents, and analytical equipment. These laboratories allow students to conduct experiments related to environmental analysis, including the determination of heavy metals, gaseous pollutants, background radiation, and specific chemical components in water and soil. In addition to the department's laboratories, master's students have access to university-wide research laboratories, including facilities for chromatography, mass spectrometry, nuclear magnetic resonance, X-ray analysis, thermal analysis, and electron microscopy. This infrastructure supports the research activities necessary for the preparation of master's theses and strengthens students' practical skills.

The university's research library provides access to print materials, electronic catalogs, and international scientific databases. Students can use reading rooms, digital platforms, and online resources to support their academic work and research activities. Access to electronic learning materials is further provided through the Academic and Research Management System, which allows students to view curricula, course materials, schedules, and assessment results online.

Student support services are well-organized and accessible. Academic advising is provided at the faculty level, helping students select courses, plan their studies, and address academic issues. The International Relations Office coordinates mobility programs and supports students participating in international exchange initiatives. The university offers psychological support services to help students adapt and address personal issues. Career and alumni services help students connect with employers and participate in internships and career-related events.

Medical services are available through the student health clinic located on campus. Housing in dormitories is provided through the Student House, which ensures safe living conditions for local and international students. Additional facilities, such as the Student Development Center, Student Space, Eco-Space, and conference rooms, foster academic, social, and cultural engagement.

The program's financial resources are managed centrally and include government funding, tuition revenue, and research grants. Financial transparency is ensured in accordance with national legislation, and funds are allocated for laboratory maintenance, research support, and the development of educational resources.

Overall, the existing infrastructure, digital systems, laboratory facilities, library resources, and established student support mechanisms create the appropriate conditions for the successful implementation of the "Ecological Chemistry" program.

Best Practice:

One of the positive practices of the educational program "7005008 – Chemistry of Nanomaterials" is the presence of a well-developed digital learning environment, including the Blackboard and SEMS platforms, which provide students with constant access to academic information, learning materials, and assessment results.

Another positive aspect of the educational program "7005008 – Chemistry of Nanomaterials" is its well-developed material and technical infrastructure, including modern laboratories, computer labs, and library resources, which support both teaching and research activities.

The "7005004 – Ecological Chemistry" educational program relies on well-equipped teaching and research laboratories, including access to modern, university-level analytical equipment. Students benefit from integrated digital systems for learning management and academic monitoring, as well as structured academic advising and psychological support services. The availability of dormitory housing,

medical services, and career guidance mechanisms demonstrates a comprehensive and student-centered support environment.

Areas for improvement:

Although the university provides sufficient educational resources, the expert group recommends the following for the educational program "7005008 – Chemistry of Nanomaterials":

- further expand access to international scientific databases and digital research resources;
- strengthen career guidance and internship opportunities in collaboration with industry partners.

For the educational program "7005004 – Ecological Chemistry," it is recommended to increase the number of partnerships with external research institutions and industrial laboratories to expand opportunities for students to complete internships and gain practical experience.

Compliance level for Standard 6 (OP "7005008 – Chemistry of Nanomaterials") – full compliance

Level of compliance with Standard 6 (OP "7005004 – Ecological Chemistry") – full compliance

Standard 7. Public Communication

Evidence and Analysis

Baku State University ensures the transparency and accessibility of information regarding its educational programs "7005008 – Chemistry of Nanomaterials" through various official communication channels. The university disseminates publicly available information through its official website, institutional publications, digital platforms, and social media resources. These channels provide stakeholders with access to up-to-date information on the university's structure, academic programs, educational policies, and research activities.

The university's official website contains information about its mission, strategic development priorities, academic structure, and offered academic programs. The public availability of such information promotes transparency and allows prospective students, employers, and other stakeholders to obtain reliable information about the university's academic activities and educational opportunities.

In addition to general information about the institution, the university provides access to academic resources and learning materials through digital platforms such as Blackboard and the System for Managing Educational and Scientific Activities (SEMS). These systems give students access to course syllabi, learning materials, assignments, and assessment results. Such mechanisms promote transparency in the educational process and facilitate effective communication between students and faculty.

The university also actively disseminates information about its academic achievements, research activities, and international cooperation through public events, conferences, and official announcements. Participation in international rankings and academic initiatives further contributes to raising the university's profile and strengthening its public reputation.

Despite these positive aspects, the self-assessment report contains limited data on the systematic publication of detailed information regarding specific educational programs, including curriculum structure, graduate outcomes, and employment statistics. Providing more structured and regularly updated information on program outcomes would enhance transparency and strengthen public trust in the educational program.

Overall, the analysis shows that the university provides general information to the public through multiple channels and maintains transparency regarding the institution's activities. However, additional efforts to improve the accessibility and completeness of information on specific programs would further enhance the effectiveness of public communication.

Baku State University provides comprehensive, transparent, and regularly updated publicly available information about its educational programs, including the educational program "7005004 – Ecological Chemistry." The information is available on the university's official website, on social media (LinkedIn, Facebook, Instagram, Twitter), on its YouTube channel, and in printed informational materials. These platforms provide detailed information about the program structure, admission requirements, faculty, research activities, student life, and the university's achievements, enabling prospective students, current students, alumni, and other stakeholders to make informed decisions.

The Public Relations and Information Department serves as the central unit responsible for communication and the dissemination of official information. It prepares press releases, news articles, and analytical reports, and coordinates with national media outlets. The department also manages the university's official website and social media accounts, monitors media coverage, and promotes the public presentation of academic and research activities.

Open House events are held regularly to introduce prospective students to the academic environment. During these events, participants receive information about program content, laboratory facilities, admission criteria, research infrastructure, and student support services. Direct communication with faculty representatives allows prospective students to ask questions and gain a clear understanding of educational opportunities.

The academic library serves as the primary source of academic information. Its collection contains over two million items, including scholarly, educational, and rare materials, and provides access to electronic resources and international databases. The library features several reading rooms with ample seating and offers access to electronic catalogs and full-text databases. Thousands of e-books and journals are available to support both educational and research activities.

Cooperation within the Azerbaijan Library and Information Consortium provides access to international scientific platforms.

The dissemination of information to the public is further enhanced by the newspaper "Baku University," which has a long history of publication and systematically covers events in the academic, scientific, and public spheres. BSU TV serves as an additional media platform, broadcasting academic events, conferences, student initiatives, and university projects. Cooperation agreements with national television channels expand the reach of the university's news and increase its visibility.

The BSU Publishing House promotes transparency by publishing textbooks, teaching materials, monographs, and scientific journals, including works prepared by faculty and students. Student organizations, such as the Student Youth Organization, the Student Union Committee, the Student Scientific Society, and "BSU Volunteers," actively disseminate information about events, projects, and initiatives, strengthening the connection between students and the administration.

Overall, BSU ensures the completeness, accessibility, and regular updating of public information. The combination of digital platforms, cooperation with the media, library resources, and student engagement mechanisms contributes to transparency, public accountability, and stakeholder awareness.

Best Practices:

A positive aspect of the university's activities is the availability of official digital communication channels, including the university website and institutional platforms, which allow stakeholders to access information about the educational program "7005008 – Chemistry of Nanomaterials" and the university's activities.

Another positive practice is the active dissemination of information about scientific achievements and international rankings, which enhances the university's visibility and reputation within the international academic community.

Baku State University provides comprehensive and accessible information about the "7005004 – Ecological Chemistry" program through its official website, social media platforms, Open House events, and collaboration with the media. The academic library offers extensive print and electronic resources, including access to international databases. Platforms such as "BSU TV," the "Baku University" newspaper, and active student organizations strengthen transparency and public communication.

Note:

Although the university publicly provides general information about the institution, the documentation contains limited data on detailed and regularly updated information regarding specific educational programs, including graduate employment data, curriculum updates, and program performance indicators.

Areas for improvement:

The expert panel recommends for the educational program "7005008 – Chemistry of Nanomaterials":

- expand the availability of publicly accessible information on specific programs, including details of curricula, learning outcomes, and graduate employment statistics;
- ensure regular updates to publicly available academic information on the university's website;
- strengthen engagement with external stakeholders by providing accessible information on program achievements and development indicators.

It is recommended to further expand English-language content on the web pages of the educational program "7005004 – Ecological Chemistry" and to increase the frequency of publishing program performance indicators (such as graduate employment and research outcomes) to enhance international visibility and stakeholder awareness.

Level of compliance with Standard 7 (Educational Program "7005008 – Chemistry of Nanomaterials") – significant compliance

Level of compliance with Standard 7 ("7005004 – Ecological Chemistry") – significant compliance

CHAPTER 3

CONCLUSION

Based on an analysis of the self-assessment report, supporting documentation, interviews with university representatives and stakeholders, as well as an inspection of the educational and research infrastructure, the external expert group conducted an independent evaluation of the educational programs **"7005008 – Chemistry of Nanomaterials"** and **"7005004 – Ecological Chemistry"** at Baku State University.

The evaluation results show that the university has established an institutional framework aimed at ensuring the quality and effectiveness of the educational process. The program operates within the regulatory framework of national legislation in the field of higher education and institutional academic policy. The university demonstrates a commitment to maintaining academic standards, promoting research activities, and creating an educational environment conducive to students' professional development.

The analysis shows that Baku State University has implemented internal quality assurance mechanisms that regulate the development and implementation of educational programs. The existence of institutional quality assurance policies, academic integrity procedures, and anti-plagiarism systems demonstrates the university's commitment to maintaining transparency and reliability in academic and research activities.

The educational program includes a structured curriculum that combines theoretical knowledge with practical and research-based learning. The teaching methods used in the program promote student engagement, independent learning, and the development of analytical and research competencies. The use of digital learning platforms and modern teaching approaches enhances the effectiveness of the educational process and supports a student-centered learning environment.

The university provides sufficient educational resources and infrastructure to support the implementation of the educational program. Modern classrooms, computer labs, digital learning platforms, and library resources create favorable conditions for both teaching and research activities. Student support mechanisms and academic advising structures further contribute to the effective organization of the educational process.

At the same time, the expert group identified a number of areas where the educational program could be further improved. These include expanding the involvement of external stakeholders in curriculum development, improving systematic mechanisms for collecting and analyzing student feedback, strengthening international academic cooperation and mobility opportunities, and increasing the availability of detailed public information regarding program outcomes and graduate employment rates.

Overall, the analysis shows that the "Nanomaterials Chemistry" and "Ecological Chemistry" programs generally meet the program accreditation standards established by the IQAA. The university demonstrates a clear commitment to maintaining academic quality, improving educational processes, and strengthening its research and educational activities in accordance with national and international standards of higher education.

Standard 1. Policy on educational program quality assurance and academic integrity (7005008 – Chemistry of Nanomaterials, 7005004 – Ecological Chemistry) – full compliance

Areas for improvement:

For the educational program "7005008 – Chemistry of Nanomaterials," the expert group recommends that the university further strengthen its quality assurance system by:

- expanding analytical reporting on the results of plagiarism and academic integrity monitoring;
- introducing regular training and awareness-raising programs on academic ethics for students and faculty;
- improving the integration of internal quality assurance results into curriculum development and program improvement processes.

For the educational program "7005004 – Ecological Chemistry," it is recommended to further formalize documentation demonstrating how stakeholder feedback is systematically analyzed and taken into account during periodic updates to the "Ecological Chemistry" program. An additional presentation of the summarized results of the internal review at the program level would enhance the transparency of the quality assurance process.

Standard 2. Development and Approval of the Educational Program, Information Management - ("7005008 – Chemistry of Nanomaterials," "7005004 – Ecological Chemistry") - significant compliance

Note:

Although the university has established procedures for the development and approval of curricula, the available documentation contains limited information on the participation of external stakeholders and industry representatives in the development and revision of curricula. Strengthening cooperation with employers and professional organizations could further improve the program's alignment with labor market requirements.

Areas for improvement:

The expert group recommends that the university:

- intensify the systematic involvement of employers and external experts in the process of developing and revising curricula;
- introduce procedures for the regular periodic evaluation of curricula based on feedback from students, graduates, and employers;
- continue developing data-driven mechanisms for improving curricula, using information obtained through quality assurance monitoring and graduate employment indicators.

For the educational program "7005004 – Ecological Chemistry," it is recommended to more clearly demonstrate how survey results and employment data lead to specific changes in the curriculum.

Standard 3. Student-centered learning, teaching, and assessment (7005008 – Chemistry of Nanomaterials) – significant compliance; (7005004 – Ecological Chemistry) – full compliance

Comments:

Although student-centered teaching methods are used within the "7005008 – Chemistry of Nanomaterials" program, the documentation contains limited information on formal procedures for collecting and analyzing student feedback regarding the quality of teaching and the effectiveness of courses. Strengthening such mechanisms would further enhance the student-centered nature of the educational process.

Areas for improvement:

The expert group recommends the following for the educational program "7005008 – Chemistry of Nanomaterials":

- establish systematic procedures for collecting student feedback on the quality of teaching and the content of educational programs;
- strengthen mechanisms for incorporating student feedback into curriculum improvement processes;
- further develop student participation in curriculum evaluation and decision-making processes.

It is recommended for the educational program "7005004 – Ecological Chemistry" to expand quantitative analytical reporting on trends in student performance, including comparative data across academic years, to strengthen the evidence base for program evaluation mechanisms.

Further development of international scientific exchange and opportunities for joint dissertation supervision in the educational program "7005004 – Ecological Chemistry" could further strengthen student-centered academic development.

Standard 4. Student Admission, Academic Performance, Recognition, and Certification – (Program "7005008 – Chemistry of Nanomaterials") – significant compliance, (Program "7005004 – Ecological Chemistry") – full compliance

Comments:

Although the university has established clear procedures for student admission and monitoring of academic performance, the documentation for the program "7005008 – Chemistry of Nanomaterials" contains limited information on

international student mobility programs, credit recognition procedures, and the recognition of prior learning.

Areas for improvement:

The expert group recommends the following for the educational program "7005008 – Chemistry of Nanomaterials":

- strengthen mechanisms for the recognition of prior learning and international credit transfer;
- expand opportunities for student academic mobility and participation in international exchange programs;
- improve documentation and reporting regarding student performance, graduation statistics, and employment outcomes.

Further expansion of the enrollment of international students in the educational program "7005004 – Ecological Chemistry" would strengthen internationalization indicators. More active participation in international academic mobility programs could enhance the level of comparative academic exchange.

Standard 5. Faculty – (Program "7005008 – Chemistry of Nanomaterials") – significant compliance; (Program "7005004 – Ecological Chemistry") – significant compliance

Note:

Although the university demonstrates the presence of qualified academic staff, the available documentation for the academic program "7005008 – Chemistry of Nanomaterials" contains limited detailed information on faculty research productivity, international collaboration, and professional development activities.

Areas for improvement:

The expert group recommends the following for the educational program "7005008 – Chemistry of Nanomaterials**":**

- provide more detailed statistical data on faculty qualifications, research productivity, and publication metrics;
- expand opportunities for international academic cooperation and joint research projects;
- strengthen professional development programs and training opportunities for academic and teaching staff.

For the educational program "7005004 – Ecological Chemistry," the number of publications in high-impact-factor journals could be increased. More active involvement of young researchers and participation in international projects would contribute to further strengthening development.

Standard 6. Learning Resources and Student Support — (Program Area "7005008 – Chemistry of Nanomaterials") – full compliance, (Program Area "7005004 — Ecological Chemistry") – full compliance

Areas for improvement:

Although the university provides sufficient educational resources, the expert group recommends the following for the educational program "7005008 – Chemistry of Nanomaterials":

- further expand access to international scientific databases and digital research resources;
- strengthening career guidance and internship opportunities in collaboration with industry partners.

For the educational program "7005004 – Ecological Chemistry," it is recommended to increase the number of partnerships with external research institutions and industrial laboratories to expand opportunities for students to complete internships and gain practical experience.

Standard 7. Public Information (OP "7005008 – Chemistry of Nanomaterials") – significant compliance, ("7005004 – Ecological Chemistry") – significant compliance

Note:

Although the university publicly provides general information about the institution, the documentation contains limited data on detailed and regularly updated information regarding specific educational programs, including data on graduate employment, curriculum updates, and program performance indicators.

Areas for improvement:

The expert panel recommends for the educational program "7005008 – Chemistry of Nanomaterials":

- expand the availability of publicly accessible information on specific programs, including details of curricula, learning outcomes, and graduate employment statistics;
- ensure regular updates to publicly available academic information on the university's website;
- strengthen engagement with external stakeholders by providing accessible information on program achievements and development indicators.

It is recommended to further expand English-language content on the web pages of the educational program "7005004 – Ecological Chemistry" and to increase the frequency of publishing program performance indicators (such as graduate employment and research outcomes) to enhance international visibility and stakeholder awareness.

Appendix 1

Program
of the external audit conducted by the IQAA expert group
at Baku State University for the accreditation of the program
March 12–13, 2026

Time	Event	Participants	Location
	Day 1: March 12, 2026		
8:45	Arrival at the university	L, EG, C	EG Office
9:00–10:00	Briefing, discussion of organizational matters	L, EG, C	EG Office Link to the conference
10:00–10:45	Interview with the university president	L, EG, C, University President	Rector's Office Link to the conference
10:45–11:00	Exchange of views among members of the external expert group	L, EG, C	EG Office Link to the conference
11:00–11:45	Interview with the university's vice-rectors	L, EG, C, Vice Rectors	Office of the Rector Link to the conference
11:45–12:00	Exchange of views among members of the external expert group	L, EG, C	EG Office Link to the conference
12:00–12:45	Interviews with heads of organizational units	L, EG, C, RSP	EG Office Link to the conference
12:45–13:00	Exchange of views among members of the external expert group	L, EG, C	EG Office Link to the conference
1:00–2:00 PM	Lunch	L, EG, C	
2:00–2:45 PM	Interviews with deans and department chairs	L, EG, C, Dean of the Faculty, Department Chair	EG's office Link to the conference
2:45–3:00 PM	Exchange of views among members of the external expert group	L, EG, C	EG Office Link to the conference
3:00–3:45 PM	Interviews with faculty members of the department regarding the accredited educational program	L, EG, C, faculty members	E.G.'s Office Link to the conference
3:45–4:00 PM	Exchange of views among members of the external expert group	L, EG, C	EG Office Link to the conference
4:00–4:45 PM	Interviews with employers	L, EG, C, Employers	EG Office

			Link to the conference
4:45–5:00 PM	Exchange of views among members of the external expert group	L, EG, C	EG Office Link to the conference
5:00–6:30 PM	Visual inspection of the laboratory's material, technical, and educational facilities	L, EG, heads departments	Academic building Link to the conference
6:30–6:45 PM	Exchange of views among members of the external expert group	L, EG, C	EG Office Link to the conference
Day 2: March 13, 2026			
8:45	Arrival at the university	L, EG, C	Academic building
9:00–11:00	Academic and research support for master's students. Selective attendance at academic exams and practical training sessions	Mon, Wed	Academic Building Practical training facilities
11:00–11:45	Discussions with students	L, EG, C, Students	EG Office Link to the conference
11:45–12:00	Exchange of views among members of the external expert group	L, EG, C	EG Office Link to the conference
12:00–13:00	Invitation of department heads at the request of experts.	L, EG, C, division heads	EG's Office
1:00–2:00 PM	Lunch	L, EG, C	
2:00–4:00 PM	Preparation of external audit reports. Review of documentation for the accredited educational program. Invitation of selected representatives from the faculty and administrative units at the request of experts.	L, EG, Department Chair, Kharkiv State University	E.G.'s Office Link to the conference
4:00–5:00 PM	Exchange of views among members of the external expert group. Preliminary results of the external audit	L, EG, C	EG's Office Link to the conference
5:00–5:30 p.m.	Meeting with management to present preliminary results of the external audit	L, EG, C	Rector's Office Link to the conference

Note: L – Head of EG, EG – Expert Group, C – Group Coordinator, RU – Heads of Structural Units

Appendix 3

LIST OF DOCUMENTS
ADDITIONAL DOCUMENTS TO BE REVIEWED BY THE UNIVERSITY

1. Curriculum
2. Working curriculum
3. Syllabi for disciplines (courses)
4. Internal policies and quality assurance system
5. Materials from collegial bodies governing the educational program
6. Materials for systematic monitoring of student performance
7. Student Theses