Annex №4

NATIONAL CENTER FOR EDUCATIONAL QUALITY ENHANCEMENT

Accreditation Expert Group Report on Cluster of Higher Education Programmes

Name of the Cluster of Educational Programmes according to the Fields of Study of the Classifier

Russian-language educational program "Oil and Gas Technologies",
Bachelor's degree

Russian-language educational program "Oil and Gas Technologies",
Master's degree

Name of Higher Educational Institution

Georgian Technical University

Evaluation Date(s)
November 1, 2025

Report Submission Date
December 19, 2025

Tbilisi

Information on the Higher educational Institution

Name of Institution Indicating its Organizational Legal Form	LEPL - Georgian Technical University
Identification Code of Institution	211349192
Type of the Institution	University

Expert Panel Members

Chair (Name, Surname, HEI/Organization, Country)	Albertus Retnanto, Texas A&M University at Qatar, Qatar
Member (Name, Surname, HEI/Organization, Country)	Inga Bochoidze, Akaki Tsereteli State University, Georgia
Member (Name, Surname, HEI/Organization, Country)	Tato Lapauri, Georgian Aviation University, Georgia
Member (Name, Surname, HEI/Organization, Country)	Giorgi Robakidze, Georgian Industrial Group (GIG), Georgia
Member (Name, Surname, HEI/Organization, Country)	Giga Khositashvili, Ilia State University, Georgia

I. Information on the Cluster of Educational Programmes

	Programme 1	Programme 2
Name of the educational programme In Georgia	ნავთობისა და გაზის ტექნოლოგიები	ნავთობისა და გაზის ტექნოლოგიები
Name of the educational programme In English	Oil and Gas Technology	Oil and Gas Technology
Level of higher education	Bachelor's Studies	Master's Studies
Qualification to be awarded	Bachelor of Oil and Gas/Petroleum Technology	Master of Oil and Gas/Petroleum Technology
Name and code of the detailed field	Russian	Russian
Indication of the right to provide teaching of subject/subjects/group of subjects of the relevant level of general education[1]	-	-
Language of instruction	Russian	Russian
Number of ECTS credits	240	120
Programme Status (Accredited/Non-accredited/Conditionally Accredited/New/International Accreditation) Indicating Relevant Decision (number, date)	Authorized, 01.10.2018 N 76	Accredited, 15.02.2022 N 152108

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

II. Accreditation Report Executive Summary

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

The history of the development of the Georgian oil industry in the Caucasus region dates back to the early 20th century. More than two dozen natural hydrocarbon deposits have been discovered in Georgia. To date, promising structures have been explored, which are notable for their estimated resources. Their discovery will help boost the industry's growth. Therefore, training highly qualified and professional personnel in this field is especially important. For this purpose, the Russian-language educational programs "Oil and Gas Technologies" were developed.

The Bachelor's and Master's degree programs "Oil and Gas Technologies" are developed based on the practical and theoretical experience gained in the oil and gas industry, as well as by studying and analyzing similar educational programs at foreign universities and considering labor market requirements.

The Russian-language Bachelor's degree program "Oil and Gas Technologies" at the Georgian Technical University was approved in 2012, and its implementation began in the 2013/14 academic year. The Russian-language Master's degree program "Oil and Gas Technologies" was approved in 2021, with implementation starting in the 2022-2023 academic year. The introduction of these programs was driven by the increased demand for oil and gas technology experts in the global labor market and, based on the experience of the Georgian Technical University, the potential to implement these programs in a specific engineering-technological field.

The "Oil and Gas Technologies" programs are designed according to European higher education standards. The educational and research activities are conducted by highly qualified local faculty who are actively involved in scientific and practical work. They use the latest methods for teaching and research or practical tasks and actively participate in local and international forums, conferences, symposiums, and congresses.

To develop educational programs, the relevant structural units of the faculty continuously collaborate with faculty academic staff, students, graduates, potential employers, and field specialists. Based on the analysis of information, opinions, recommendations, and consultations gathered from meetings and surveys with them, changes are made to the educational programs.

The Russian-language bachelor's degree program "Oil and Gas Technologies" was accredited in 2012 and has been operating under the authorized regime since 2018. Over its course, the program has been improved and aligned with Order No. 69/n of the Minister of Education, Science, Culture, and Sports of Georgia. It also considers labor market demands, best local and international practices, legislative requirements, and feedback from employers, graduates, and students. The program reflects the learning outcomes aligned with level 6 of the National Qualifications Framework, along with the teaching methods, assessment strategies, and other key features necessary to achieve these outcomes. It has been operating since 2022. By the resolution of the Academic Council of the Georgian Technical University, the program has been modified twice.

It also considers labor market needs, best local and international practices, legislative requirements, and the results of surveys from employers, graduates, and students. The program aligns with the learning outcomes for level 7 of the National Qualifications Framework and the teaching methods, assessment techniques, and other essential features necessary to achieve them.

- ## Overview of the Accreditation Site Visit

The accreditation evaluation panel visited Georgian Technical University on November 1, 2025, at the university's campus in Tbilisi, Georgia. The panel reviewed various documents in the weeks prior to the visit, including the Self-Evaluation Report, program syllabus, faculty lists involved in teaching the program's courses, the map of program objectives and learning outcomes, samples of individual course documentation, staff CVs, and the program budget. Several additional documents were provided in Georgian. Additionally, links to the university's strategic plan, mission, and program website were supplied.

The evaluation panel conducted interviews and gathered information throughout the day, starting with the university's senior management team and then moving on to the department head, the Self-Evaluation Report team, the Quality Assurance service, core academic staff, invited personnel, employers, alumni, and students from various year groups. The panel concludes that the university's members were responsive to requests and quickly provided the requested information, proofs, and records.

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

The evaluation panel examined the information in the self-assessment form, confirming that it directly addresses the requirements outlined in the evaluation criteria for the relevant component of the standard. Additional details were collected throughout the day to further support the review. The recommendations and suggestions provided aim to assist the program's ongoing process of continuous improvement.

- ## Recommendations

a. General Recommendations of the Cluster

Standard 1.1

1. It is recommended that stakeholder engagement be formalized through established procedures and documented systematically, with regular assessments conducted to support continuous programme improvement.

Standard 2.2

1. To strengthen the development of practical and research competencies within the program's learning outcomes, it is recommended to increase the use of modern methods and tools in teaching, including during the preparation of bachelor's and master's theses.

Standard 4.1

1. It is recommended that the workload scheme reflects the full workload of both academic and invited staff, including the scientific workload assigned to academic personnel, and that the existing inconsistencies be corrected.

2. It is also recommended that the university and faculty administration, in consultation with academic staff, analyze indicators related to scientific publications and plan appropriate measures to enhance academic personnel's research activities and, accordingly, improve their international visibility.

b. Russian-language educational program "Oil and Gas Technologies", Bachelor's degree

Standard 1.2

1. It is recommended to incorporate professional skills into the learning outcomes to ensure that graduates develop strong competencies in communication, teamwork, and ethical conduct in addition to technical knowledge.

Standard 1.3

1. It is recommended to systematically analyze assessment results, use the findings to implement targeted improvement actions, and then monitor and re-evaluate in the subsequent assessment cycle to effectively close the loop and ensure continuous enhancement of learning outcomes.

Standard 1.4

1. It is recommended to enhance the content of the educational program to better meet internationalization needs, thereby increasing its global relevance and competitiveness.

Standard 1.5

1. It is recommended to integrate industry-standard software into teaching and learning activities to ensure students gain hands-on experience with tools widely used in global oil, gas, and energy industries, thereby strengthening graduate employability and international relevance.

c. Russian-language educational program "Oil and Gas Technologies", Master's degree

Standard 1.2

1. It is recommended that the Programme Learning Outcomes be reviewed to ensure consistent use of measurable action verbs from Bloom’s Taxonomy to improve clarity and reflect appropriate cognitive levels.

Standard 1.3

1. It is recommended to conduct ongoing assessment of the program to improve it, ensure alignment with learning outcomes, and strengthen overall academic quality.

Standard 1.4

1. It is recommended to enhance the master's program by integrating modern components, such as data analytics, to support internationalization and ensure its relevance to global practices, emerging technologies, and international professional standards.

Standard 1.5

1. It is recommended to integrate industry-standard software to develop high-level competencies in reservoir simulation, production optimization, data analytics, and decision-making for complex engineering systems.

Standard 3.2

1. For ensuring the quality of Master's thesis preparation process and research outputs it is recommended to specify the supervisor-student ration in relevant regulatory documents.

- **Suggestions**

a. General Suggestion of the Cluster

Standard 2.3

1. It is suggested that the learning outcomes of the study courses clearly reflect the skills developed through the applied teaching–learning methods, including responsibility and analytical abilities.

Standard 3.1

1. Curretly, student awareness of the purpose and value of institution self-essessment remains low. Therefore, it is suggested that communication and engagement in this are be strenghtened. This strengthening should aim to help students better understand the importance of self-assesment and encourage their active involvement, ultimately fostering a stronger culture of continuous improvement and shared responsibility for educational quality..

Standard 4.4

1. It is suggested to deliver more diverse materials in English language.
2. It is suggested to renovate specialized tools (for example: drilling tools, rig models, and packer systems).

Standard 5.1

1. It would be suggested to further enhance their engagement-particularly in the stages of data interpretation, curriculum revision, and follow-up monitoring-to strengthen shared ownership and deepen the culture of internal quality assurance

c. Russian-language educational program "Oil and Gas Technologies", Master's degree

Standard 2.4

1. In accordance with the appendix to the Rules for Checking Plagiarism in Works Performed at the Georgian Technical University, preliminary and repeated plagiarism checks are fee-based and calculated according to the number of pages. It is suggested to introduce a free preliminary plagiarism check that would allow students to upload an early version of their work before the mandatory review. This measure would support educational ethics, enhance students' understanding of academic integrity, and allow them to refine their work prior to final submission.

- **Quantitative Data Analysis of the educational programme in accordance with the requirements of the accreditation standards, for** example:

  - **Staff and Supervisors** - Number of the staff involved in the programme (including academic, scientific, international and invited staff), including the staff holding PhD degree in the sectoral direction; ratio of the academic/scientific staff and invited staff; ratio of the affiliated and academic staff; ratio of master's and/or doctoral students to supervisors; supervisors' workload scheme;

1. Russian-language educational program "Oil and Gas Technologies", Bachelor's degree

The program involves a total of 34 staff members, which includes academic, scientific, and invited personnel. The academic team comprises 30 members: 15 professors, 13 associate professors, and two assistant professors. All academic staff are affiliated with the institution, and there are no international academic staff members. Additionally, four invited staff members are participating in the educational activities.

The ratio of the number of affiliate academic staff to the number of students enrolled in the programme is 0.70, the ratio of the academic/scientific/invited staff to the number of students enrolled in the programme is 0.79, and the ratio of the academic/scientific staff and invited staff is 7.50.

2. Russian-language educational program "Oil and Gas Technologies", Master's degree

The program involves a total of 13 staff members, which includes academic, scientific, and invited personnel. The academic team comprises 13 members: 4 professors and nine associate professors. All academic staff are affiliated with the institution, and there are no international academic staff members.

The ratio of the number of affiliate academic staff to the number of students enrolled in the programme is 3.25; the ratio of the academic/scientific/invited staff to the number of students enrolled in the programme is 3.25. The ratio of Master's and Doctoral students to supervisors is 1.25, with 5 supervisors and 4 Master's and PhD students.

- **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 index[2]; staff participation rates in local and international conferences; other scientific/research indicators;

1. Russian-language educational program "Oil and Gas Technologies", Bachelor's degree

   The scientific publications of individuals involved in the program number 333. There are 170 publications in local journals, 25 in international journals, 86 presentations at local conferences, 49 at international conferences, and three other scientific/research indicators.

2. Russian-language educational program "Oil and Gas Technologies", Master's degree

   The scientific publications of individuals involved in the program number 81. There are 40 publications in local journals, 9 in international journals, 15 presentations at local conferences, 16 at international conferences, and one other scientific/research indicator.

- **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.);

1. Russian-language educational program "Oil and Gas Technologies", Bachelor's degree

   Over the past five years, the program has hired one new academic staff member and lost one staff member. The turnover rate is 3.3%, and the retention rate is 96.7%.

2. Russian-language educational program "Oil and Gas Technologies", Master's degree

   Over the past five years, the program has hired one new academic staff member and lost one staff member. The turnover rate is 7.7%, and the retention rate is 92.3%.

- **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;

1. Russian-language educational program "Oil and Gas Technologies", Bachelor's degree

   The number and percentage of students for the first academic year are as follows:

2020-2021	2021-2022	2022-2023	2023-2024	2024-2025

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

n	%	n	%	n	%	n	%	n	%
7	100	9	100	9	100	12	100	11	100

2. Russian-language educational program "Oil and Gas Technologies", Master's degree

The number and percentage of students for the first academic year are as follows:

2022-2023		2023-2024		2024-2025		The fourth admission		The fifth admission	
n	%	n	%	n	%	n	%	n	%
1	100	2	100	6	100	-	-	-	-

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

▪ Brief Overview of the Best Practices

The “Oil and Gas Technologies” educational program aligns with current labor market needs and is supported by many years of a close, stable partnership with the industry. These long-standing collaborations ensure the curriculum remains relevant to industry practices, facilitate knowledge exchange, and strengthen graduate employability.

▪ Information on Sharing or Not Sharing the Argumentative Position of the HEI

a. General Recommendations of the Cluster

Component 1.1 – Recommendation 1

It is recommended that stakeholder engagement be formalized through established procedures and documented systematically, with regular assessments conducted to support continuous programme improvement.

The Argumentative Position

All stakeholders (academic and invited staff, students, graduates, and employers) are involved in defining the knowledge, abilities, and competencies within the programme. Stakeholders are closely engaged in the development and enhancement of the programme; surveys and meetings are conducted with them, which are documented and duly presented. To support continuous programme improvement, we regularly receive evaluations from business representatives, as well as peer assessments from both local and foreign universities (In 2022, the Master’s programme received evaluations from Russia and Kazakhstan, and during preparation for the current accreditation process, from Azerbaijan).

Expert Panel Response

The expert panel acknowledges the effective and regular involvement of stakeholders in the assessment process.

Component 2.2 – Recommendation 2

To strengthen the development of practical and research competencies within the program's learning outcomes, it is recommended to increase the use of modern methods and tools in teaching, including during the preparation of bachelor's and master's theses.

The Argumentative Position

We consider the recommendation to be useful advice, which we will certainly apply for the purpose of programme development.

Expert Panel Response

The expert panel acknowledges this.

Component 4.1 – Recommendation 3

It is recommended that the workload scheme reflects the full workload of both academic and invited staff, including the scientific workload assigned to academic personnel, and that the existing inconsistencies be corrected.

The Argumentative Position

On June 6, 2025, the Academic Council of the Georgian Technical University adopted Resolution № 01-05-04/92 "On Approval of the Staffing List, Remuneration Amounts, Conditions, and Maximum Workload of Academic Staff of the LEPL – Georgian Technical University," which specifies the remuneration and maximum workload limits for academic staff (see Annex 1).

Expert Panel Response

The expert panel observes that the new regulation does not change the factual circumstance that, in the case of certain staff members, scientific workload is reflected, and the weekly workload amounts to 65 and 84 hours, which constitutes an inconsistency. Therefore, this recommendation remains unchanged.

Component 4.1 – Recommendation 4

It is also recommended that the university and faculty administration, in consultation with academic staff, analyze indicators related to scientific publications and plan appropriate measures to enhance academic personnel's research activities and, accordingly, improve their international visibility.

The Argumentative Position

In July 2025, the Georgian Technical University conducted a competition for academic staff. The competition terms define the scientific publication obligations of professors, associate professors, and assistant professors, specifically:

1. The duties of an "A" category professor include:
    - Publication of at least one scientific article every two years in an international, high- ranking peer-reviewed journal/collection (with student participation);
    - Participation, at least once every two years, as a presenter in an international scientific forum (conference, symposium, workshop, scientific seminar, congress).
2. The duties of a "B" category professor include:
    - Publication of at least one scientific article every two years in an international, high- ranking peer-reviewed journal/collection (with student participation);
    - Participation, at least once every two years, as a presenter in an international scientific forum (conference, symposium, workshop, scientific seminar, congress).
3. The duties of an "A" category associate professor include:
    - Publication of at least one scientific article every two years in an international, high- ranking peer-reviewed journal/collection;
    - Participation, at least once every two years, as a presenter in an international scientific forum (conference, symposium, workshop, scientific seminar, congress).
4. The duties of a "B" category associate professor include:
    - Publication of at least one scientific article every two years in an international, high- ranking peer-reviewed journal/collection (with student participation);
    - Participation, at least once every two years, as a presenter in an international scientific forum (conference, symposium, workshop, scientific seminar, congress).
5. The duties of an assistant professor include:
    - Publication of a scientific article in an international, high- ranking peer- reviewed journal/collection within four years;
    - Participation, within four years, as a presenter in an international scientific forum (conference, symposium, workshop, scientific seminar, congress).

This information is public and available on the Georgian Technical University web-page: https://gtu.ge/News/28090/ Academic Staff Competition Terms.

Expert Panel Response

The expert panel issued this recommendation based on the quantitative data presented and the interviews conducted with staff; therefore, the recommendation remains unchanged.

b. General Recommendations of the Russian-language educational program "Oil and Gas Technologies", Bachelor's degree

Standard 1.2 – Recommendation 5

It is recommended to incorporate professional skills into the learning outcomes to ensure that graduates develop strong competencies in communication, teamwork, and ethical conduct in addition to technical knowledge.

The Argumentative Position

We consider the recommendation to be useful advice, as part of it is already reflected in the curriculum outcomes. Specifically, the programme outcome develops students' communication and ethical behavior skills by enabling them to present their opinions and ideas in forms appropriate to the context for both specialists and non-specialists in the field of oil and gas technologies. Teamwork ability is developed through industrial (practical) training.

Expert Panel Response

The expert panel acknowledges this.

Standard 1.3 – Recommendation 6

It is recommended to systematically analyze assessment results, use the findings to implement targeted improvement actions, and then monitor and re-evaluate in the subsequent assessment cycle to effectively close the loop and ensure continuous enhancement of learning outcomes.

The Argumentative Position

In our view, this indication should not have the status of a recommendation, since our submitted learning outcomes assessment report states that "monitoring of student outcomes in the relevant courses will continue in subsequent academic years". Our learning outcomes research was conducted during the 2022/2023 and 2023/2024 academic years, after which we continued monitoring those courses in which low outcomes were identified. Since the accreditation materials were submitted to the National Center for Educational Quality Enhancement on April 30, 2025, the monitoring results were not included in the documentation, as the process is still ongoing and the cycle has not yet been completed.

Expert Panel Response

The expert panel acknowledges the implementation of an assessment process within the programme.

Standard 1.4 – Recommendation 7

It is recommended to enhance the content of the educational program to better meet internationalization needs, thereby increasing its global relevance and competitiveness.

The Argumentative Position

We consider the recommendation to be useful advice, which we will certainly apply for the purpose of programme development.

Expert Panel Response

The expert panel acknowledges this.

Standard 1.5 – Recommendation 8

It is recommended to integrate industry-standard software into teaching and learning activities to ensure students gain hands-on experience with tools widely used in global oil, gas, and energy industries, thereby strengthening graduate employability and international relevance.

The Argumentative Position

We consider the recommendation to be useful advice, which we will certainly apply for the purpose of programme development.

Expert Panel Response

The expert panel acknowledges this.

c. General Recommendations of the Russian-language educational program "Oil and Gas Technologies", Master's degree

Standard 1.2 – Recommendation 9

It is recommended that the Programme Learning Outcomes be reviewed to ensure consistent use of measurable action verbs from Bloom's Taxonomy to improve clarity and reflect appropriate cognitive levels.

The Argumentative Position

This recommendation concerns the use of verbs from Bloom's Taxonomy in the learning outcomes reflected in the curriculum. We would like to note that, in this part of the educational programme, all learning outcomes are formulated using verbs derived from Bloom's Taxonomy.

Regarding the recommendation, we would like to note the following: The recommendation suggests the use of verbs such as проектировать (to design), анализировать (to analyze), оценивать (to evaluate), and формировать (to form).

In this regard, we note that one of the key elements of the Russian language is synonymy — "a type of semantic relationship in a language that implies full or partial coincidence of meanings of linguistic expressions" (see: T. V. Zherebilo, Dictionary of Linguistic Terms). In other words, different linguistic units (words, phrases) may differ in sound or spelling but convey the same idea or concept or characteristic, enriching and diversifying speech.

Bloom's Taxonomy applies the principle of synonymy in Russian translations as well. Accordingly, we have used all the verbs proposed by the respected experts, but in their synonymous forms:

Проектировать=производить

Анализировать=оценивать

Формировать=составлять

We would also like to note that the respected experts themselves apply the principle of synonymy in their recommendation. For example, the verbs проектировать and формировать, which are recommended separately by the respected experts, are inherently synonymous, just as the verbs анализировать and оценивать are synonymous (see the Russian online synonym dictionary: (https://sinonim.org/). Accordingly, we would like to emphasize that this recommendation is fully reflected in the learning outcomes.

Expert Panel Response

The expert panel acknowledges this.

Standard 1.3 – Recommendation 10

It is recommended to conduct ongoing assessment of the program to improve it, ensure alignment with learning outcomes, and strengthen overall academic quality.

The Argumentative Position

In our opinion, this indication should not carry the status of a recommendation, since the learning outcomes have not yet been assessed since the programme is new and there is an insufficient number of students to conduct research. The learning outcomes assessment mechanism has been developed and presented, and as the student cohort increases, the assessment will be conducted in the same manner as in the Undergraduate programme in "Oil and Gas Technologies."

Expert Panel Response

The expert panel acknowledges this.

Standard 1.4 – Recommendation 11

It is recommended to enhance the master's program by integrating modern components, such as data analytics, to support internationalization and ensure its relevance to global practices, emerging technologies, and international professional standards.

The Argumentative Position

We consider the recommendation to be useful advice, which we will certainly apply for the purpose of programme development.

Expert Panel Response

The expert panel acknowledges this.

Standard 1.5 – Recommendation 12

It is recommended to integrate industry-standard software to develop high-level competencies in reservoir simulation, production optimization, data analytics, and decision-making for complex engineering systems.

The Argumentative Position

We consider the recommendation to be useful advice, which we will certainly apply for the purpose of programme development.

Expert Panel Response

The expert panel acknowledges this.

Standard 3.2 – Recommendation 13

For ensuring the quality of Master's thesis preparation process and research outputs it is recommended to specify the supervisor-student ration in relevant regulatory documents.

The Argumentative Position

In July 2025, the Georgian Technical University conducted a competition for academic staff, where the competition terms define the obligations of professors, associate professors, and assistant professors regarding supervision of master's students, specifically:

1. A professor's duties include supervision of master's students (as a rule, no more than three students simultaneously);
2. An associate professor's duties include supervision of master's students (as a rule, no more than two students simultaneously);

3. An assistant professor's duties include supervision of master's students (as a rule, no more than two students simultaneously).

This information is public and available on the Georgian Technical University web-page: https://gtu.ge/News/28090/ Academic Staff Competition Terms. Accordingly, the number of academic staff involved in the programme is fully sufficient to supervise master's students.

Expert Panel Response

The expert panel acknowledges the responses and reclassified the recommendation as a suggestion.

- **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**

The Russian-language bachelor's degree program "Oil and Gas Technologies" was accredited in 2012 and has been operating in the authorization regime since 2018. During its existence, the following changes have been made: the program has been improved and brought into line with the Order No. 69/n of the Minister of Education, Science, Culture and Sports of Georgia.

By resolution of the Academic Council of the Georgian Technical University, the program has undergone several modifications. As a result of the last modification, the following changes were made:

1. The course "Introduction to Geology" (6 credits) - new literature was added, the evaluation system was changed;
2. The course "Structural Geology and Geomapping" (5 credits) - new literature was added, the evaluation system was changed;
3. The course "Phase Zoning of Hydrocarbons and Separate Forecasting of Oil and Gas" (from the block of elective courses 3) - was removed from the program;
4. The course "Rock Failure during Well Drilling" (from the block of elective courses 1) - was removed from the program;
5. The course "Geological and Exploration Studies during Drilling" (from the block of elective courses 2) - was removed from the program;
6. The course "Automation of Drilling Rigs and Electrical Equipment" (from the block of elective courses 4) - was removed from the program;
7. The course "Optimization of Oil Field Development" (from the block of elective courses 5) - was removed from the program;
8. The course "Well Completion" (from the block of elective courses 4) - was removed from the program;
9. The course "Oil and Gas Field Development", which was in the block of elective courses 5 - changed its status and became a core course;

10. The course “Regional Geology” (3 credits) - changed its name and became “Historical and Regional Geology”, the author, the number of lectures also changed and practical topics, literature.
11. The training courses “Oil and Gas Provinces of the World 1” (3 credits) and “Oil and Gas Provinces of the World 2” (6 credits) were merged and the new name is “Oil and Gas Provinces of the World” (5 credits).
12. The training course “Learning Practice in Oil and Gas Technologies” was renamed and became “Industrial Practice in Oil and Gas Technologies”.
13. The training course “Drilling Fluids” (6 credits) - 1 credit was reduced and became 5 credits;
14. The training course “Interpretation of Geophysical Survey Data” (6 credits) - 1 credit was reduced and became 5 credits;
15. The prerequisites for admission to the training course “Methods for Calculating Oil, Gas and Condensate Reserves and Resource Assessment” have been changed, instead of the training course “Oil and Gas Exploration Geology” it has become the training course “Fundamentals of Oil and Gas Exploration Geology”;
16. The name of the training course “Geophysics” has been changed to “Field Geophysics”, and an admission prerequisite has also been added, namely the training course “Physics 2”;
17. The prerequisite for admission to the training course “Exploration Geophysics 1” has become “Field Geophysics” instead of “Geophysics”;
18. The prerequisite for admission to the training course “Interpretation of Geophysical Survey Results” has become “Field Geophysics” instead of “Geophysics”;
19. Basic literature has been updated in about 30 courses

It has been operating since 2022. By the resolution of the Academic Council of the Georgian Technical University, the program has been modified twice.

It also takes into account labor market requirements, best local and international practices, legislative requirements, and the results of surveys of employers, graduates, and students. The program reflects the requirements for learning outcomes corresponding to level 7 of the National Qualifications Framework and the teaching-learning, assessment methods, and other essential characteristics necessary to achieve them.

As a result of the last modification, the following changes were made:

1. The name of the course “Oil and Gas Hydrogeology” was changed to “Oil and Gas Exploration Hydrogeology”, and the topics of lecture and practical work were also changed;
2. A new course “Modern Methods of Impacting the Productive Layer” was added to Block 1 of elective courses;
3. A new course “Criteria for Predicting Hydrocarbon Phase Zoning in Sedimentary Layers of the Earth’s Crust” was added to Block 2 of Elective Courses;
4. The main literature in the courses was updated;

5. The author of the courses “Business Communication in a Foreign Language” (French) and “Theory and Practice of Translation of Specialized Texts” (French) was changed;

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

№	Contents/ Standard	Programme 1 Russian-language educational program "Oil and Gas Technologies ", Bachelor's degree	Programme 2 Russian-language educational program "Oil and Gas Technologies ", Master's degree
1.	**Educational Programme Objectives, Learning Outcomes and their Compliance with the Programme**	**Substantially**	**Substantially**
1.1	Programme Objectives	Substantially	Substantially
1.2	Programme Learning Outcomes	Substantially	Substantially
1.3	Evaluation Mechanism of the Programme Learning Outcomes	Substantially	Substantially
1.4	Structure and Content of Educational Programme	Substantially	Substantially
1.5	Academic Course/Subject	Substantially	Substantially
2.	**Methodology and Organization of Teaching, Adequacy of Evaluation of Programme Mastering**	**Complies**	**Complies**
2.1	Programme Admission Preconditions	Complies	Complies

2.2	The Development of Practical, Scientific/Research/ Creative/ Performance and Transferable Skills	Substantially	Substantially
2.3	Teaching and Learning Methods	Complies	Complies
2.4	Student Evaluation	Complies	Complies
3.	**Student Achievements and Individual Work with Them**	**Complies**	**Complies**
3.1	Student Consulting and Support Services	Complies	Complies
3.2	Master's and Doctoral Student Supervision	Select Appropriate	Complies
4	**Providing Teaching Resources**	**Complies**	**Complies**
4.1	Human Resources	Substantially	Substantially
4.2	Qualification of Supervisors of Master's and Doctoral Student	Select Appropriate	Complies
4.3	Professional Development of Academic, Scientific and Invited Staff	Complies	Complies
4.4	Material Resources	Complies	Complies
4.5	Programme/Faculty/School Budget and Programme Financial Sustainability	Complies	Complies

5	**5. Teaching Quality Enhancement Opportunities**	**Complies**	**Complies**
5.1	Internal Quality Evaluation	Complies	Complies
5.2	External Quality Evaluation	Complies	Complies
5.3	Programme Monitoring and Periodic Review	Complies	Complies

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 need for active Russian-language educational programs in "Oil and Gas Technologies" at both the Bachelor's and Master's levels arises from the ongoing global demand for oil and gas, which calls for increased extraction efforts and the training of specialists for local and international job markets. Georgian Technical University has established program objectives that align with the institution's mission, goals, and strategic plan. Program learning outcomes are regularly assessed to enhance the program. The content and consistent structure of the program ensure the

achievement of set goals and expected learning outcomes. Educational programs grouped into clusters are logically connected by study fields and develop according to the respective levels of higher education.

The program objectives need to consider local labor market demands, trends and needs of the international labor markets. The involvement of every stakeholder (academic and invited staff, students, alumni, employers) are required to set the knowledge, skills and competencies in the program. It is recommended that stakeholder engagement be formalized through established procedures and documented systematically, with regular assessments conducted to support continuous programme improvement.

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 Russian-language educational program "Oil and Gas Technologies", Bachelor's degree[3]

The goal of Georgian Technical University is to develop competitive professionals who demonstrate civic awareness and uphold both national and human values. It aims to create new opportunities for research, education, and technology, and to promote the growth of a knowledge-based economy in the country. Additionally, the university seeks to engage in innovative efforts to integrate into the global ecosystem. In line with this goal and given the challenges of a rapidly changing world and growing societal needs, those working in the oil and gas industry are responsible for meeting the increasing global demand for hydrocarbons. This responsibility involves approaches focused on the industry's sustainable growth, which are accessible only to specialists with the necessary knowledge and principles.

The objectives and learning outcomes of the proposed programs are clearly connected, well-defined, aligned with labor market needs, and both practical and achievable. The program's objectives align with the mission of Georgian Technical University.

The demand for specialists in oil and gas technology is increasing worldwide, including in Georgia. Georgia has the capacity to increase oil and gas production. This leads to an increased need for professionals in this field. This significant demand is backed by market research and surveys among companies and graduates. The Russian-language bachelor's educational program "Oil and Gas Technologies" is public and available to both interested individuals and the public on the website of the Faculty of Mining and Geology of the Georgian Technical University

The Russian-language bachelor's educational program "Oil and Gas Technologies" is public and available to both interested individuals and the general public on the website of the Faculty of Mining and Geology of the Georgian Technical University https://gtu.ge/apply/bachelor/mining/ru.php

Description and Analysis - Programme 2 Russian-language educational program "Oil and Gas Technologies", Master's degree[4]

[3] Please repeat the description and analysis field according to the number of programmes, for example, programme 2 (name, cycle), programme 3 (name, cycle) and so on. (Please consider this reference format when evaluating each subsequent component).

[4] Please repeat the description and analysis field according to the number of programmes, for example, programme 2 (name, cycle), programme 3 (name, cycle) and so on. (Please consider this reference format when evaluating each subsequent component).

The master's program "Oil and Gas Technologies" emphasizes the development of practical and research skills to improve graduates' employability in Georgia and worldwide. It is the only Russian-language master's degree in Georgia focused on oil and gas technologies.

The educational programme objective, aligned with the mission of Georgian Technical University and the Faculty of Mining and Geology, seeks to cultivate competitive professionals in oil and gas technologies for both local and international labor markets, thereby fostering sectoral and societal advancement. The program aims to equip students with the information and skills to advance their studies to the next level and to execute pertinent projects and innovative advancements in mining and extraction. The program is posted on the website of the Faculty of Mining and Geology https://gtu.ge/apply/masters/mining/ru.php , which ensures its publicity and accessibility.

Evidences/Indicators

- The order of the Minister of Education and Science of Georgia No. 133/n of September 9, 2013 "Statute of the Legal Entity of Public Law – Georgian Technical University"
- Mission, Vision, and Values of the Georgian Technical University;
- LEPL Georgian Technical University Development Strategic Plan 2022-2028
- Rules for Planning, Developing, Assessing and Developing an Educational Program at the Georgian Technical University (Resolution of the Academic Council of the GTU No. 01-05-04/261, 23.09.2019);
- Mining and Geological Faculty website;
- Regulation of the Faculty of Mining and Geology.
- Russian-language educational program "Oil and Gas Technologies", Bachelor's degree;
- Russian-language educational program "Oil and Gas Technologies", Master's degree;
- Employers' feedback on educational programs;
- Survey results;
- Labor market analysis;
- Feedback from specialists (experts) in the field on the program;
- Interview results.

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 that stakeholder engagement be formalized through established procedures and documented systematically, with regular assessments conducted to support continuous programme improvement.	None
Programme 1 Russian-language	None	None

educational program "Oil and Gas Technologies", Bachelor's degree		
Programme 2 Russian-language educational program "Oil and Gas Technologies", Master's degree	None	None

Evaluation [5]

Component 1.1 - Programme Objectives	**Evaluation**
Programme 1 Russian-language educational program "Oil and Gas Technologies", Bachelor's degree	Substantially
Programme 2 Russian-language educational program "Oil and Gas Technologies", Master's degree	Substantially

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.

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

[5] Evaluation is performed for each programme separately.

Georgian Technical University develops the learning outcomes of its educational programs that are logically connected to the program's goals and the field of study's characteristics. The learning outcomes align with the program's objectives and facilitate the acquisition of fundamental information, skill development, and the cultivation of responsibility and autonomy as outlined in the curriculum.

These outcomes are measurable, achievable, and realistic, aligned with the appropriate level of qualification, the detailed field description, and the qualification to be awarded. They specify the knowledge, skills, and competencies that graduates of each program within the cluster will gain. Specifically, they include understanding the fundamental principles of the field, familiarity with its main developmental stages, theoretical insights into oil and gas technologies, including their evolution, concepts, and current trends, and proficiency in both practical and theoretical methods, applying them according to their qualification level.

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 Russian-language educational program "Oil and Gas Technologies", Bachelor's degree[6]

Georgian Technical University develops the learning outcomes of the educational program to align with the program's goals and include the knowledge, skills, responsibility, autonomy, and achievement outlined in the content. The learning outcomes are designed to consider the employment requirements of graduates by profession. When developing the learning outcomes, emphasis was placed on both the specifics of the field and the demands and trends of the local and international labor markets, with local and international practices considered.

The study examined the connection between bachelor's degree programs and further higher education, focusing on their potential to improve sector-specific knowledge, professional skills, and competencies through continuing education. It confirmed that the established learning outcomes and the essential parts of the systematic program for achieving them collectively ensure, both formally and substantively, the fulfillment of the graduate's academic goals aligned with their academic level. At the same time, this provides a competitive advantage and high demand in the job market.

Program learning outcomes should incorporate the development and assessment of professional skills, including communication, teamwork, leadership, ethical responsibility, and problem-solving, to prepare graduates for effective performance in professional practice. Technical knowledge is already incorporated within the current learning outcomes, forming a core component of the programme's intended competencies. It is recommended to incorporate professional skills into the learning outcomes to ensure that graduates develop strong competencies in communication, teamwork, and ethical conduct in addition to technical knowledge.

[6] Please repeat the description and analysis field according to the number of programmes, for example, programme 2 (name, cycle), programme 3 (name, cycle) and so on. (Please consider this reference format when evaluating each subsequent component).

Description and Analysis - Programme 2 Russian-language educational program "Oil and Gas Technologies", Master's degree[7]

Georgian Technical University develops the learning outcomes for the Master's degree program "Oil and Gas Technologies" that align with the program's goals and encompass the knowledge, skills, responsibility, autonomy, and achievements outlined by the program's content. The Master's program, through its educational, practical, and research components, systematically ensures the achievement of the following results.

To ensure the appropriate level of the programme learning outcomes, they should be reviewed and refined to ensure the consistent use of measurable and clearly defined action verbs. This improves clarity and accurately reflects the corresponding cognitive levels. Using action-oriented verbs from Bloom's Taxonomy in formulating learning outcomes makes assessment more effective and transparent, as these verbs clearly define the expected level of cognitive performance and enable faculty to create measurable, consistent evaluation criteria. It is recommended that the Programme Learning Outcomes be reviewed and refined to ensure the consistent use of measurable and clearly defined action verbs derived from Bloom's Taxonomy, for example, verbs such as *analyzing, evaluating, designing, and formulating*, to improve clarity and the representation of appropriate cognitive levels.

Evidences/Indicators

- Russian-language educational program "Oil and Gas Technologies" Bachelor's degree;
- Russian-language educational program "Oil and Gas Technologies" Master's degree;
- LEPL Georgian Technical University Mission
- LEPL Georgian Technical University Development Strategic Plan 2022-2028
- Interview results.

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	None	None
Programme 1 Russian-language educational program "Oil and Gas Technologies", Bachelor's degree	It is recommended to incorporate professional skills into the learning outcomes to ensure that graduates develop strong competencies in communication, teamwork, and ethical conduct in addition to technical knowledge.	None

[7] Please repeat the description and analysis field according to the number of programmes, for example, programme 2 (name, cycle), programme 3 (name, cycle) and so on. (Please consider this reference format when evaluating each subsequent component).

Programme 2 Russian-language educational program "Oil and Gas Technologies", Master's degree	It is recommended that the Programme Learning Outcomes be reviewed to ensure consistent use of measurable action verbs from Bloom's Taxonomy to improve clarity and reflect appropriate cognitive levels.	None

Evaluation

Please, evaluate the compliance of the programme with the component

Component 1.2 Programme Learning Outcomes	Evaluation
Programme 1 Russian-language educational program "Oil and Gas Technologies", Bachelor's degree	Substantially
Programme 2 Russian-language educational program "Oil and Gas Technologies", Master's degree	Substantially

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 evaluation mechanisms for the learning outcomes of the program established at the Faculty of Mining and Geology facilitate the participation of all stakeholders in the program development process. To prepare for the accreditation of the educational program, a program self-assessment group is formed well in advance, typically comprising academic and invited personnel, students, graduates, and industry specialists or potential employers.

The assessment of program learning outcomes consists of four stages:

- Formulation of program learning outcomes;

- Analysis of the curriculum to ensure that students have the opportunity to achieve the stated learning outcomes;
- Evaluation of program learning outcomes;
- Use of evaluation results to improve the program.

As the submitted documents show, the faculty has developed a clear mechanism for assessing and developing learning outcomes across both levels of study. This mechanism defines the methods, tools, and indicators used for curriculum analysis and for measuring learning outcomes against established benchmarks. Learning achievements are systematically assessed at the end of each semester to ensure that intended outcomes align with target indicators.

The issue of approving/modifying the learning outcomes of educational courses, as well as assessing and analyzing the learning outcomes achieved by students, is discussed at the first stage of a department meeting, which brings together both academic and invited personnel of the Higher Education Institution. If necessary, the department ensures the invitation of external people depending on the content of the issue under discussion. These may be specialists in the field, colleagues from another university, potential employers, etc.

The process includes continuous monitoring of educational resources, such as the library collection and laboratory facilities, as well as regular surveys of student and staff satisfaction, graduate employability, and employer feedback.

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 Russian-language educational program "Oil and Gas Technologies", Bachelor's degree

The assessment mechanism for program learning outcomes has been established. It defines the protocols and relevant instruments to ensure the quality evaluation and progress of higher education programs at the Faculty of Mining and Geology of the Georgian State University of Technology. The structure and frequency of assessing the program's learning outcomes are tailored to the field's characteristics, with appropriate forms and methods selected based on the training goals and achievable learning outcomes. This helps students evaluate their achievement levels, provides feedback, and offers both direct and indirect assessment opportunities.

The evaluation of learning outcomes was conducted based on the data from the 2022/2023 and 2023/2024 academic years, as detailed in the report, which states: The learning result was established, showing a little deviation from the goal benchmark, and two training courses were recognized in the assessment, where students exhibited a low performance indicator. These include: 1. Occupational Safety; 2. Petroleum and Natural Gas Exploration Geology.

The participation of academic and visiting staff, students, and graduates is demonstrated by the fact that, as outlined in the “Rules for Planning, Development, Evaluation and Development of Educational Programs at the Georgian Technical University,” all matters related to program development are discussed and approved by both the Faculty of Mining and Geology Council and the GTU Academic Council. Additionally, the Faculty Commission, made up of GTU academic staff and students, regularly assesses the educational process and teaching quality following the established procedures.

The program learning outcomes evaluation cycle consists of defining, collecting, and analyzing data necessary to measure learning outcomes. Programme learning outcomes assessment results are used to improve the programme. It is recommended to systematically analyze assessment results, use the findings to implement targeted improvement actions, and then monitor and re-evaluate in the subsequent assessment cycle to effectively close the loop and ensure continuous enhancement of learning outcomes.

Description and Analysis - Programme 2 Russian-language educational program "Oil and Gas Technologies", Master's degree

The assessment system for learning outcomes and its frequency takes into account the field's specificities, incorporating appropriate forms and methods that enable students to evaluate their attainment of the educational program's learning outcomes. Both direct and indirect assessment methods are used in this evaluation process. Learning outcomes have not been assessed at this stage because the program is new and there are not enough students to conduct research.

The program learning outcomes evaluation cycle consists of defining, collecting, and analyzing data necessary to measure learning outcomes to improve the program. It is recommended to conduct ongoing assessment of the program to improve it, ensure alignment with learning outcomes, and strengthen overall academic quality.

Evidences/Indicators

- Mechanism for assessing the learning outcomes of the program;
- Methodology and analysis documents for labor market research;
- Russian-language educational programs “Oil and Gas Technologies”;
- Survey results;
- Order on the establishment of the Faculty Commission, amendments, and regulations;
- Minutes of the Faculty Council and the Faculty Temporary Commission;
- Feedback from industry specialists on the program;
- Program learning outcomes assessment report.
- Interview results.

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	None	None
Programme 1 Russian-language educational program "Oil and Gas Technologies", Bachelor's degree	It is recommended to systematically analyze assessment results, use the findings to implement targeted improvement actions, and then monitor and re-evaluate in the subsequent assessment cycle to effectively close the loop and ensure	

	continuous enhancement of learning outcomes.	
Programme 2 Russian-language educational program "Oil and Gas Technologies", Master's degree	It is recommended to conduct ongoing assessment of the program to improve it, ensure alignment with learning outcomes, and strengthen overall academic quality.	

Evaluation

Component 1.3 Evaluation Mechanism of the Programme Learning Outcomes	Evaluation
Programme 1 Russian-language educational program "Oil and Gas Technologies", Bachelor's degree	Substantially
Programme 2 Russian-language educational program "Oil and Gas Technologies", Master's degree	Substantially

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

Georgian Technical University has formulated and received the Academic Council's approval for the Regulations on Planning, Developing, Assessing, and Enhancing Educational Programs, which establish the process for compiling and developing each educational program. The pertinent structural units of the university, encompassing the administrative and academic personnel of the Faculty of Mining and Geology engaged in the formulation and enhancement of educational programs, as well as faculty committees, are diligently governed by the aforementioned regulations.

The structure and content of the programme consider new research findings and modern scientific achievements, and the programme's content envisages key issues of internationalization.

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 Russian-language educational program "Oil and Gas Technologies", Bachelor's degree

The Russian-language bachelor's degree program "Oil and Gas Technologies" is designed in accordance with the "Rules for Planning, Development, Evaluation, and Improvement of Educational Programs" issued by the Georgian Technical University, which outlines the methodology for developing the program. Its structure and content ensure the achievement of the program's learning outcomes. The qualification awarded aligns with the program content and learning outcomes. The content, volume, and complexity of the program match the level of education. The educational components included are arranged sequentially and logically. Prerequisites for moving to the next component are appropriate. The program is developed in accordance with Georgia legislation and is compatible with the European Credit Transfer and Accumulation System. The program includes free components.

Recognizing and adjusting to the rapidly changing fundamentals of engineering and technology is essential for maintaining the program's relevance and effectiveness. Incorporating cutting-edge technologies like artificial intelligence, machine learning, and edge computing prepares students for modern engineering practices and improves their employability. It is recommended to enhance the content of the educational program to better meet internationalization needs, thereby increasing its global relevance and competitiveness.

Description and Analysis - Programme 2 Russian-language educational program "Oil and Gas Technologies", Master's degree

The Master's degree program "Oil and Gas Technologies" is structured around both theoretical and practical experience gained in the oil and gas industry, as well as the study and analysis of labor market requirements. The program will provide students with the knowledge and skills necessary for their profession, helping them build a successful career. The structure and content of the programme consider new research findings and modern scientific achievements

The structure and content of the program consider new research findings and modern scientific achievements. The program is expected to equip graduates with advanced technical knowledge, research skills, and industry-ready competencies to address complex challenges in oil and gas technology. It is recommended to enhance the master's program by integrating modern components, such as data analytics, to support internationalization and ensure its relevance to global practices, emerging technologies, and international professional standards.

Evidences/Indicators

- Resolution of the Academic Council of GTU No. 01-05-04/261 of September 23, 2019 – Rules for Planning, Development, Evaluation and Development of the Educational Program;
- Russian-language Bachelor's Educational Program "Oil and Gas Technologies" with attached syllabi;
- Russian-language Master's Educational Program "Oil and Gas Technologies" with attached syllabi;
- Faculty of Mining and Geology website
- Academic calendar
- "Regulation of the Georgian Technical University on Master's Degree"
- "Instructions for the Management of the Educational Process at the Georgian Technical University"
- Rules for Conducting and Assessing GTU Student Internship

- Evidence of participation of interested parties involved in the development of the program - minutes of the Faculty Council, Department, Self-Assessment Group;
- Comparison table of similar programs;
- Evaluations of external experts.
- Interview results.

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	None	None
Programme 1 Russian-language educational program "Oil and Gas Technologies", Bachelor's degree	It is recommended to enhance the content of the educational program to better meet internationalization needs, thereby increasing its global relevance and competitiveness.	None
Programme 2 Russian-language educational program "Oil and Gas Technologies", Master's degree)	It is recommended to enhance the master's program by integrating modern components, such as data analytics, to support internationalization and ensure its relevance to global practices, emerging technologies, and international professional standards.	None

Evaluation

Please, evaluate the compliance of the programme with the component

Component 1.4. Structure and Content of Educational Programme	Evaluation
Programme 1 Russian-language educational program "Oil and Gas Technologies", Bachelor's degree)	Substantially
Programme 2 Russian-language educational program "Oil and Gas Technologies", Master's degree	Substantially

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 curriculum and credit distribution in educational programs ensure the achievement of the learning outcomes outlined by this course. The curriculum and total credits in the primary discipline support the attainment of the program's learning outcomes. The primary literature specified in the syllabi of each academic program guarantees the achievement of the program's learning outcomes. The learning outcomes of each academic program align with the qualification levels established by the National Qualifications Framework for higher education. The credit allocation for each academic program is determined based on the expected learning outcomes, the need for diverse teaching methods, and the complexity and scope of the content to be learned.

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 Russian-language educational program "Oil and Gas Technologies", Bachelor's degree

Each course's learning outcomes align with the program's overall goals. The educational materials listed in the syllabi mainly include specialized literature, textbooks, supplementary texts, and lecture courses published between 2014 and 2024. Recent achievements in the relevant field are also used, such as materials from scientific conferences and journals.

The content and learning outcomes of the academic programme ensure the achievement of the programme's learning outcomes. To support the employment demand of program graduates and the needs of the international labor markets, it is recommended to integrate industry-standard software into teaching and learning activities to ensure students gain hands-on experience with tools widely used in global oil, gas, and energy industries, thereby strengthening graduate employability and international relevance.

Description and Analysis - Programme 2 Russian-language educational program "Oil and Gas Technologies", Master's degree

The core element of the educational program, the curriculum (syllabus), is developed according to the standards established by the Georgian Technical University. The syllabus authors independently determine its content, considering the course specifics, and include additional information or brief explanations relevant to each syllabus item. They also independently decide on the pedagogical methods and activities, assessment components and techniques, and other related parameters. The preparation of the syllabi is coordinated by the Faculty Quality Assurance Service and Dean's Office at the faculty level, and by the University Quality Assurance Service and Department of Education at the university level.

The content and learning outcomes of the academic programme ensure the achievement of the programme's learning outcomes. To support the content and level of the programme, which encompass key issues of internationalization, it is recommended to integrate industry-standard software to develop high-level competencies in reservoir simulation, production optimization, data analytics, and decision-making for complex engineering systems.

Evidences/Indicators

- Russian-language educational programs for bachelor's and master's degrees "Oil and Gas Technologies";
- Training course programs (syllabuses);
- Map of program goals and learning outcomes;
- Mechanism for assessing program learning outcomes;
- Library catalog
- Interview results

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	None	None
Programme 1 Russian-language educational program "Oil and Gas Technologies", Bachelor's degree)	It is recommended to integrate industry-standard software into teaching and learning activities to ensure students gain hands-on experience with tools widely used in global oil, gas, and energy industries, thereby strengthening graduate employability and international relevance.	None
Programme 2 Russian-language educational program "Oil and Gas Technologies", Master's degree)	It is recommended to integrate industry-standard software to develop high-level competencies in reservoir simulation, production optimization, data analytics, and decision-making for complex engineering systems.	None

Evaluation

Component 1.5. Academic Course/Subject	Evaluation
Programme 1 Russian-language educational program "Oil and Gas Technologies", Bachelor's degree)	Substantially
Programme 2 Russian-language educational program "Oil and Gas Technologies", Master's degree)	Substantially

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

Cluster evaluation

Description and Analysis of Cluster

Georgian Technical University has developed a regulation on the planning, development, evaluation, and improvement of educational programs. This regulation defines the general approaches to admission requirements and is aligned with the standards and component requirements.

The institution has also developed instructions for the formation of the student contingent and for student mobility. The instruction defines the rules for granting student status at both the bachelor's and master's levels. It also includes conditions prescribed by Georgian legislation for admission without the Unified National Examinations.

Appendix #3 of the instruction defines indicators for student contingent planning, including:

- ratio of academic, scientific, and invited staff to the number of students;
- ratio of administrative staff to the number of students;
- ratio of affiliated staff to the number of students;
- ratio of supervisors to doctoral students;
- ratio of supervisors to master's students;
- academic staff retention rate;
- invited staff retention rate;
- administrative and support staff retention rate;
- graduate employment rate;
- graduate employment rate according to the obtained qualification;
- doctoral thesis defense rate;
- ratio of funding allocated for research/artistic, development, and creative activities to the number of students;
- ratio of total area to the number of students;
- ratio of educational space to the number of students.

Student contingent planning at GTU is closely linked to the planning and development of educational programs. The planning of the student contingent is carried out by the faculty, with the involvement of program managers, program coordinators, and academic departments. It is based on the university's mission, its strategic development plan, and the results of labor market research. The number of students with active status per program is also taken into consideration.

The programs included in the cluster are Russian-language programs. Therefore, in addition to the requirements defined by Georgian legislation, proof of Russian language proficiency is required. Proficiency may be confirmed through an official state document attesting to completion of general secondary education (attestat), a certificate, or via an interview/testing held at GTU.

The expert panel requested documents confirming the interview process, which were provided to the experts.

The programs' admission requirements are fair and transparent. The programs are publicly available on the GTU website (Faculty of Mining and Geology), ensuring public access to the admission criteria for the cluster programs.

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 (Russian-language educational program "Oil and Gas Technologies", Bachelor's degree)

For admission to the Russian-language bachelor's program, the following requirements are established:

An applicant is eligible to study in the bachelor's program if they hold an official state certificate of complete general education or an equivalent document and are enrolled in accordance with the procedures defined by Georgian legislation.

Proficiency in the Russian language (level B2) is required. Language proficiency may be confirmed by an official state document of complete general education (school certificate/attestat), a language certificate, or through an interview/testing conducted at GTU.

Accordingly, the admission requirements for the bachelor's program comply with existing legislation, are logical, and are directly related to the program level, program content, and learning outcomes, the awarded qualification, and the language of instruction.

Description and Analysis - Programme 2 (Russian-language educational program "Oil and Gas Technologies", Master's degree)

For admission to the master's educational program "Oil and Gas Technologies", the following requirements are established:

An applicant is eligible to enroll in the master's program if they hold a bachelor's degree or an equivalent academic qualification in the fields of engineering, manufacturing, and construction, or in the fields of natural sciences, mathematics, and statistics (e.g., geology, geophysics, chemistry). Applicants are enrolled based on the results of master's examinations (the Unified Master's Exam and an examination/examinations defined by GTU).

Applicants must present a certificate confirming knowledge of a foreign language (English, German, or French) at a level not lower than B2, or must pass a language exam at GTU's Examination Center. Admission to the program

without passing master's examinations is possible in accordance with the procedures established by Georgian legislation.

For enrollment in the Russian-language master's program, applicants must possess Russian language proficiency at least at level B2. Proof of proficiency may be provided through different forms, as specified by university regulations.

The admission requirements for the master's program are logical. Although applicants holding a bachelor's degree in other relevant fields (in addition to graduates of the corresponding bachelor's program) may enroll, a university examination in the specialty is required. Accordingly, the admission requirements are directly linked to the program's content, learning outcomes, level of study, awarded qualification, and language of instruction.

Evidences/Indicators

- Russian-language Bachelor's and Master's programs "Oil and Gas Technologies";
- GTU Instruction on Student Contingent Formation and Mobility;
- GTU Regulation on Planning, Development, Evaluation, and Improvement of Educational Programs;
- GTU Official Website;
- Documents Confirming Russian Language Proficiency;
- GTU Regulation on Master's Studies;
- Sample Questions of the Program-Specific Entrance Examination;
- Interview Results.

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	None	None
Programme 1 Russian-language educational program "Oil and Gas Technologies", Bachelor's degree)	None	None
Programme 2 Russian-language educational program "Oil and Gas Technologies", Master's degree	None	None

Evaluation

Please, evaluate the compliance of the programme with the component

Component 2.1 Programme Admission Preconditions	Evaluation
Programme 1 Russian-language educational program "Oil and Gas Technologies", Bachelor's degree	Complies
Programme 2 Russian-language educational program "Oil and Gas Technologies", Master's degree	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 learning outcomes and content of the clustered programs include courses designed to develop practical and transferable skills. Practical and laboratory activities incorporated in the relevant courses contribute at different levels to the formation of skill-based competencies. According to the learning outcomes and the level of education, the programme ensures the development of practical skills in students. To further enhance the development of useful and research competencies within the learning outcomes, it is important to increase the use of modern methods and tools in the educational process, including in the preparation of bachelor's and master's theses.

The program structure includes practical components as well as bachelor's and master's theses. GTU has developed regulations for the implementation and assessment of student internships. According to this regulation, an internship provides students with the opportunity to apply their acquired knowledge and competencies in a real working environment, further refine them, and develop professionally. The regulation defines the competencies and responsibilities of supervisors at the university and at the internship host organization, the rules for maintaining internship logbooks and reports, and the assessment procedures.

GTU has signed cooperation agreements and memoranda with the following organizations:

- LLC "Block Operating Company";
- LLC "Geophysics International Group";

- LLC “Hydrological Company Intergeo Universal”;
- LEPL “State Agency of Oil and Gas”;
- JSC “Georgian Oil and Gas Corporation”;
- LLC “RMG GOLD” and JSC “RMG COPPER”.

The agreements with internship host organizations specify the objectives of the internship, the number of students from both programs, and the duration of internships. In both programs, the industrial internship component aligns with the program's learning outcomes at the third level.

In addition to the curricular components, students have the opportunity to participate in student conferences, working meetings conducted by representatives of various organizations, and professional training sessions.

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

- Clustered Programs (Russian-Language Bachelor’s and Master’s Programs “Oil and Gas Technologies”);
- Course Syllabi of the Educational Programs;
- Rules for conducting and evaluating student practice of the Georgian Technical University;
- Agreements and memorandums of practice;
- Interview Results.

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	To strengthen the development of practical and research competencies within the program's learning outcomes, it is recommended to increase the use of modern methods and tools in teaching, including during the preparation of bachelor’s and master’s theses.	None
Programme 1 Russian-language	None	None

educational program "Oil and Gas Technologies", Bachelor's degree)		
Programme 2 Russian-language educational program "Oil and Gas Technologies", Master's degree	None	None

Evaluation

Please, evaluate the compliance of the programmes with the component

Component 2.2. The Development of Practical, Scientific/Research/Creative/Performing and Transferable Skills	**Evaluation**
Programme 1 Russian-language educational program "Oil and Gas Technologies", Bachelor's degree)	Substantially
Programme 2 Russian-language educational program "Oil and Gas Technologies", Master's degree	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

GTU has developed an instruction on teaching–learning methods and corresponding activities.

The teaching–learning methods used in the clustered programs align with the learning outcomes defined in the course syllabi, the course content, and the level of study.

Considering the specific nature of the programs, a variety of teaching methods are used. The educational courses include: lectures, seminars (group work), practical sessions, laboratory activities, internships, course assignments/projects, consultations, and independent study.

Various learning activities are also applied, including discussions/debates, demonstrations, analysis, synthesis, induction, deduction, research-based learning, case analysis, brainstorming, verbal/oral activities, written work, explanation-based instruction, action-oriented learning, project development, and presentations.

The teaching–learning methods specified in the course syllabi, tailored to each course's characteristics, ensure student interaction and promote active engagement, particularly in practical learning formats. During practical and laboratory sessions, students develop the skills required for performing tasks with appropriate responsibility and autonomy, depending on the level of study.

However, the syllabi of the courses provide limited indication of the competencies that students are expected to develop through the applied teaching methods, including responsibility and analytical skills.

When determining teaching–learning methods, the interests and needs of international students, as well as their individual needs, are taken into account— a fact confirmed by the students during the interview 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 (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

- GTU Instruction on Teaching–Learning Methods and Corresponding Activities;
- Clustered Programs (Russian-Language Bachelor's and Master's Programs "Oil and Gas Technologies");
- Course Syllabi of the Educational Programs;
- Interview Results.

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	None	It is suggested that the learning outcomes of the study courses clearly reflect the skills developed through the applied teaching–learning methods, including responsibility and analytical abilities.

Programme 1 Russian-language educational program "Oil and Gas Technologies", Bachelor's degree)	None	None
Programme 2 Russian-language educational program "Oil and Gas Technologies", Master's degree	None	None

Evaluation

Please, evaluate the compliance of the programmes with the component

Component 2.3. Teaching and Learning Methods	**Evaluation**
Programme 1 Russian-language educational program "Oil and Gas Technologies", Bachelor's degree)	Complies
Programme 2 Russian-language educational program "Oil and Gas Technologies", Master's degree	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/performative 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

Based on the documentation submitted by the Georgian Technical University and the results of the accreditation site-visit, it should be noted that student evaluation system operating at the university complies with the requirements established by legislative regulations. A 100-point evaluation system is implemented at the university, where 100 is the maximum positive score, and 51 is the minimum passing score. There are five categories of positive grades: A (91-100), B (81-90), C (71-80), D (61-70), E (51-60), and two categories of negative grades: FX (41-50) and F (0-40).

It is essential that the university has approved internal documents regulating the administration of the educational process and student assessment, which outline predetermined procedures. Because these evaluation procedures are defined in advance and available to students, the process remains transparent.

The student evaluation process includes midterm, final and additional assessments. The university operates an Examination Center, through which exams are conducted in a centralized and organized manner.

It is noteworthy that during the exams, students' personal data is concealed, meaning their identity cannot be identified by the lecturer. Final exams are conducted centrally in the Examination Hall, except for cases where it is impossible due to the specifics of the exam. Students are provided with complete information (schedule, location, and conditions) about the exams in advance. Also, the university's regulations define code of ethics, which aims at eliminating dishonest actions and guaranteeing a fair and objective examination process.

Regarding the conduct of exams and evaluations, the procedure for appealing an assessment is important. A student who disagrees with the assessment of learning outcomes is entitled to submit a justified appeal to the Dean within five working days from the moment they are informed of the assessment result and request a review of the outcome. The appeal is reviewed, and the relevant conclusion is prepared by a subject-specific commission established by Dean's order. Based on this conclusion, the Dean makes a decision or ensures that the matter is reviewed by the Faculty Council.

Within the cluster presented by the university, the evaluation methods are given and outlined in the syllabus of each academic course. As for the Master's thesis, the assessment of the Master's thesis is carried out collegially. According to the university's existing regulations, the Master's thesis is evaluated once (with a final assessment) during the public defense.

To prevent plagiarism and uphold academic integrity, research papers are checked using the "Strikeplagiarism.com" platform. It is noteworthy that according to the existing regulations of the institution, if plagiarism is detected, the work is not evaluated, and the acceptable percentage of "similarity" for SC1 – the portion of the thesis (in percentage) that contains phrases of at least 5 words found in other literary sources is not more than 60%; for SC2 – the portion of the thesis (in percentage) that contains segments of at least 25 words found in other literary sources is not more than 10% and for SC3 – the portion of the thesis (in percentage) that contains phrases from other literary sources presented in the form of citations is not more than 30%. If the author and/or their academic supervisor disagree with the authorized person's decision, they are entitled to submit an appeal to the relevant Faculty/School council or the director of an independent scientific-research unit within the following 2 (two) working days. The Faculty/School council or the director of an independent scientific-research unit establishes a commission, which makes the appropriate decision within 10 (ten) working days. The author and/or their academic supervisor may appeal the

authorized person's decision only once, in accordance with the procedures established by the Rules for checking plagiarism in the work performed at the Georgian Technical University.

Based on the appendix of the Rules for checking plagiarism in the work performed at the Georgian Technical University a preliminary plagiarism check conducted before the first mandatory review and/or a repeated check after negative result from the mandatory review, is subject to a fee and is determined based on the number of pages in the thesis. It is suggested that students were allowed to upload a preliminary version of their work in advance, giving them the opportunity to refine the text before final submission, free of charge, it will serve both to protect the principles of educational ethics and to better engage students in understanding academic values.

Overall, GTU's assessment system reflects a legally compliant, transparent and student-oriented approach. By integrating diversified evaluation components, continuous quality monitoring and plagiarism prevention mechanisms, the University ensures academic rigor while supporting professional readiness in accordance with standards.

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

- Bachelor's and Master's degree programs in Russian "Oil and Gas Technologies" and course syllabuses.
- Instruction on the management of the educational process at the Georgian Technical University.
- Rules for checking plagiarism in the work performed at the Georgian Technical University.
- Regulations of the LLP of Georgian Technical University on Master's Degree.
- GTU Code of Ethics and Disciplinary Responsibility Norms.
- Interview Results.
- University Webpage.

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 Russian-language educational program "Oil and Gas Technologies", Bachelor's degree	None	None
Programme 2 Russian-language educational program "Oil and Gas Technologies", Master's degree	None	In accordance with the appendix to the Rules for Checking Plagiarism in Works Performed at the Georgian Technical University, preliminary and repeated plagiarism checks are fee-based and calculated according to the number of pages. It is suggested to introduce a free preliminary plagiarism check that would allow students to upload an early version of their work before the mandatory review. This measure would support educational ethics, enhance students' understanding of academic integrity, and allow them to refine their work prior to final submission.

Evaluation

Please, evaluate the compliance of the programmes with the component

Component 2.4. Student Evaluation	Evaluation
Programme 1 Russian-language educational program "Oil and Gas Technologies", Bachelor's degree	Complies
Programme 2 Russian-language educational program "Oil and Gas Technologies", Master's degree	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

Based on the documentation submitted by the Georgian Technical University and the interviews conducted by the expert panel, it was established that students receive support in planning the educational process, improving academic performance and career planning. Internal structural units of the institution, program heads and personnel delivering the academic courses are involved in these processes.

Interviews with both local and international students consistently highlighted that faculty administrative staff provide assistance with post-enrollment navigation within the university. Students also emphasized the significance of the university's open days, held at the start of each academic year, as comprehensive meetings where all details pertaining to the educational process are discussed. This approach facilitates smooth and effective integration for both local and international students into the university environment.

Information necessary for the educational process is accessible to students on https://vici.gtu.ge/, platform.

In order to better manage the activities of the department, the position of Student Services Administrator was added to the department at all faculties of the GTU, who work with students at the faculties. This ensures that information

related to the educational process is shared with students. Students can address questions to the university's administrative and academic personnel via email or https://vici.gtu.ge/, platform.

Importantly, various student clubs operate at the university. Interviews with students noted that the clubs help them in their development.

Both the administration and the students confirmed that student constantly receive notification about exchange projects, conferences and various activities.

The university has a Student Employment Support Service, which aims to support the career advancement of students and graduates. This service focuses on organizing training and job forums. This service also shares notification with students and graduates about existing vacancies.

Interviews with the students and personnel established that consultations are scheduled based on the students' request. Also, as head of programs had explained, a special schedule is prepared during the semester for consultation hours.

It should be noted that the university has mechanisms for supporting socially vulnerable students including financial support. In particular the GTU "Rules for Providing Discounts on Tuition Fees for Students" defines the rules and conditions for providing discounts on tuition fees for students (professional, bachelor's, master's, doctoral) of the Georgian Technical University. Also, during the interviews with students was stated that students have the opportunity to split their tuition fee into several payments.

While GTU conducts institutional self-assessment as part of its quality assurance framework, student awareness and understanding of these processes remain limited. Interviews with the students revealed that many of them are unfamiliar with the role and significance of self-assessment in strengthening academic programs and institutional development. This gap suggests that there is a need for targeted awareness-raising initiatives, ensuring that students not only recognize the importance of self-assessment but also see themselves as active contributors to it. Improving communication and engagement in this area would foster a stronger culture of continuous improvement.

Overall, GTU provides a comprehensive and structured system of student support encompassing orientation, academic consultation, career development, internationalization, extracurricular activities and financial aid. University demonstrates strong engagement with employers, fosters student participation in decision-making and supports both current students and alumni in their professional development. Continued efforts to enhance awareness of self-assessment processes will further strengthen student involvement, ensuring even more transparent, equitable and supportive learning environment.

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

- Documents/Information on student involvement in local and international activities in 2020-2025.
- Memorandums of understanding.
- Rules for financing student projects.
- Rules for Providing Discounts on Tuition Fees for Students.
- Interviews with Students and Alumni.
- University Webpage.

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	None	Curretly, student awareness of the purpose and value of institution self-essessment remains low. Therefore, it is suggested that communication and engagement in this are be strenghtened. This strengthening should aim to help students better understand the importance of self-assesment and encourage their active involvement, ultimately fostering a stronger culture of continuous improvement and shared responsibility for educational quality.
Programme 1 Russian-language educational program "Oil and Gas Technologies", Bachelor's degree	None	None
Programme 2 Russian-language educational program "Oil and Gas Technologies", Master's degree	None	None

Evaluation .

Please, evaluate the compliance of the programmes with the component

Component 3.1 Student Consulting and Support Services	Evaluation

Programme 1 Russian-language educational program "Oil and Gas Technologies", Bachelor's degree	Complies
Programme 2 Russian-language educational program "Oil and Gas Technologies", Master's degree	Complies

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

According to the "Regulations of the Georgian Technical University on Master's Studies" a master's student supervisor may be a professor, associate professor, assistant professor, invited staff/lecturer (a person holding doctoral academic degree), emeritus professor, or a principal or senior research fellow from a scientific institute/center integrated with GTU, holding a doctoral degree. A supervisor may also be an employee of another institution holding a doctoral degree, provided that a contract or memorandum is in place between GTU and that institution. The supervisor, in agreement with the master's student, prepares an individual work plan, which must indicate the title for the master's thesis, the list of compulsory and elective courses/modules/concentrations and the scientific-research activities to be conducted as part of the research component. The supervisor oversees the master's student's work on the basis and their preparation for the defense.

The examination committee may include professors, associate professors, assistant professors, invited staff/lecturers, emeritus professors, and principal or senior research fellows from GTU's academic departments or integrates scientific institutes in the relevant or related field of the master's program. Individuals holding a doctoral degree from other institutions may also be included. The examination committee must consist of 5-7 members. It is chaired by the committee chair, who must be a member of the GTU's academic staff. More than two-thirds of the committee must be present at the defense. As a rule, the supervisor of the master's student should attend the defense.

Although interviews indicated that no supervisor oversees more than three master's students at the same time, and the following provisions are included in the contracts of the relevant personnel:

- Assistant Professor: responsible, among other duties for supervising master's students (as a rule, no more than 2 master's students simultaneously).
- Associate Professor: responsible, among other duties for supervising master's and/or doctoral students (as a rule, no more than 2 master's students and 2 doctoral students simultaneously).
- Professor: responsible, among other duties for supervising master's and/or doctoral students (as a rule, no more than 3 master's students and 3 doctoral students simultaneously).

The corresponding regulatory document does not explicitly define a supervisor-student ratio, although relevant provisions are included in individual employment contracts. The absence of a clearly articulated ratio at the regulatory level may lead to inconsistencies in supervisory workload allocation. In some cases, supervisors may be assigned an excessive number of students, which can affect the quality and effectiveness of supervision. A high supervisory workload may limit the time and attention that can be devoted to each student's research, potentially influencing the overall quality of research outcomes.

In this context, it is suggested that the supervisor-student ration currently reflected in contractual arrangements be formally incorporated into the relevant regulatory documents in order to ensure consistency, transparency and sustainable supervision practices across the institution.

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.

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	**N/A**
Number of master's students	**4**
//Number of doctoral students	**N/A**
Ratio - supervisors of master's theses/master's students	**5/4**
Ratio - supervisors of doctoral theses/doctoral students	**N/A**

Evidences/Indicators

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

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)

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

General recommendations/ Suggestion of the Cluster	None	None
Programme 1 Russian-language educational program "Oil and Gas Technologies", Bachelor's degree	None	None
Programme 2 Russian-language educational program "Oil and Gas Technologies", Master's degree	**None**	For ensuring the quality of Master's thesis preparation process and research outputs it is suggested to specify the supervisor-student ration in relevant regulatory documents.

Evaluation

Please, evaluate the compliance of the programmes with the component

Component 3.2. Master's and Doctoral Student Supervision	Evaluation
Programme 1 Russian-language educational program "Oil and Gas Technologies", Bachelor's degree	Select Appropriate
Programme 2 Russian-language educational program "Oil and Gas Technologies", Master's degree	Complies

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;

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 programs integrated in the cluster presented by the Georgian Technical University (GTU) are implemented by academic staff with appropriate qualifications, who are engaged in the programs in accordance with university regulations.

The GTU Charter defines the rules for occupying academic positions. According to these rules, academic positions may be filled only through an open competition. The Charter also sets the conditions for election to academic positions (Professor, Associate Professor, Assistant Professor, Assistant). The document additionally defines the conditions for inviting external personnel to relevant positions.

At the university, invited professors (invited professor and/or invited teacher) are divided into categories “P,” “A,” and “AP.” The rights and responsibilities of these categories correspond to the status of Professor, Associate Professor, Assistant Professor, or Teacher. Regulations related to personnel are also outlined in the Statute of the Faculty of Mining and Geology, which is consistent with the university’s Charter.

GTU has developed a “Methodology for Determining the Number of Academic, Scientific, and Invited Personnel for a Program.” According to this methodology, when planning the number of academic and invited staff, similar educational courses are grouped into “subject clusters.” Based on the total workload of a “subject cluster,” the required number of academic personnel is determined, and a competition is announced.

The qualification of academic personnel is confirmed by scientific publications from the last 5 years, including research papers indexed in the Scopus database. It is notable that, according to the presented data, there are many publications in local journals and participation in regional conferences, while publications in international journals and participation in international conferences are relatively low. It is important that the university and faculty administration, together with academic staff, analyze these indicators and plan measures to improve personnel's research activities and, accordingly, their international visibility.

At GTU, the workload of academic and invited staff is regulated by the "Instruction for Calculating and Distributing Academic Workload." According to this document, the total workload must not exceed 1100 hours per year, including 400 or 200 academic hours, depending on the employment contract. Academic workload includes hours allocated to lectures, practical/seminar and laboratory sessions, course projects/jobs, consultations, industrial practice, final thesis supervision, and supervision of Master's and PhD students. Weekly contact hours are defined by credit. For each academic course, the teacher's workload includes an additional 5 hours of consultation per academic group.

The report presents the total workload of the program staff, including academic and scientific workload for both programs in the cluster. It should be noted that specific issues require clarification. For example, only a few academic staff members have a scientific workload listed, even though the academic workload includes research activities. Additionally, some weekly workloads are listed as 65 or 84 hours, which is inconsistent with the regulations. Therefore, it is important that the workload scheme reflects the full workload of both academic and invited staff, including the scientific workload defined for academic personnel, and that existing discrepancies are corrected. The number of academic and invited personnel in the clustered programs is adequate relative to the number of students and ensures the sustainability of the programs at both study levels.

GTU has a regulation regarding the status of an educational program coordinator. According to this regulation, the coordinator is responsible for the content, quality, implementation, and development of the program. Within their competencies, the coordinator manages activities related to planning, designing, implementing, and developing the program.

The cluster programs are supported by GTU administrative and support personnel, including staff from the Faculty of Mining and Geology and the related departments. In accordance with the faculty statute and corresponding job descriptions, the qualifications of administrative and support staff are aligned with their duties and responsibilities.

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 (Russian-language educational program "Oil and Gas Technologies", Bachelor's degree)

The bachelor's educational program "Oil and Gas Technologies" is implemented in accordance with university regulations. The program is delivered by 34 academic and invited staff, including 15 Professors, 13 Associate Professors, 2 Assistant Professors, and 4 invited personnel.

The ratio of academic/invited staff to students is 34/43. It should be noted that all 30 members of the core program staff have affiliation contracts with GTU, and their affiliation rate is 0%. The program is also supported by 4 invited personnel, of whom 3 have been involved in program delivery during the last five years.

The submitted documentation, practical experience, and interview results confirm the qualification of the bachelor's program coordinator. The coordinator participated in the program development process, is one of the program implementers, and is involved in program evaluation and development activities.

Programme 1 (Russian-language educational program "Oil and Gas Technologies", Bachelor's degree)[9]				
Number of the staff involved in the programme (including academic, scientific, and invited staff)	Number of Programme Staff	Including the staff with sectoral expertise[10]	Including the staff holding PhD degree in the sectoral direction[11]	Among them, the affiliated academic staff
Total number of academic staff	**30**	**15**	**15**	**14**
- Professor	15	7	7	7
- Associate Professor	13	6	6	6
- Assistant-Professor	2	1	1	1
- Assistant	-	-	-	-
Invited Staff	4	1	1	_
Scientific Staff	-	-	-	_
Including International Staff	-	-	-	-

Description and Analysis - Programme 2 (Russian-language educational program "Oil and Gas Technologies", Master's degree)

The master's program "Oil and Gas Technology" is implemented by 13 academic staff, including 4 Professors and 9 Associate Professors. The program currently has 4 active students. Accordingly, the ratio of academic staff to students is 13/4, which fully ensures the program's sustainability, particularly given that all academic staff are affiliated with GTU.

The program does not include invited personnel. Over the last five years, one academic staff member left the program, and one was added.

The coordinator of the master's program leads the program in accordance with university regulations and holds appropriate qualifications, as confirmed by academic and practical experience and scientific publications. The coordinator is actively involved in the implementation process and participates in expert activities within the field.

Programme 2 (Russian-language educational program "Oil and Gas Technologies", Master's degree)[12]

[9] In case of necessity please add the appropriate number of tables for the educational programmes grouped in a cluster.
[10] Staff implementing the relevant components of the main field of study
[11] Staff with relevant doctoral degrees implementing the components of the main field of study
[12] In case of necessity please add the appropriate number of tables for the educational programmes grouped in a cluster.

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	13	8	8	8
- Professor	4	3	3	3
- Associate Professor	9	5	5	5
- Assistant-Professor	-	-	-	-
- Assistant	-	-	-	-
Invited Staff	-	-	-	_
Scientific Staff	-	-	-	_
Including International Staff	-	-	-	-

Evidences/Indicators

- Charter of the Georgian Technical University (GTU).
- Statute of the Faculty of Mining and Geology, GTU.
- Instruction for the Calculation and Distribution of Academic Workload, GTU.
- Methodology for Determining the Number of Academic, Scientific, and Invited Personnel, GTU.
- Job Descriptions of GTU Administrative and Support Personnel.
- Workload Scheme of Academic/Scientific/Invited Staff Involved in the Program.
- Regulation on the Status and Responsibilities of the Educational Program Coordinator, GTU.
- Documentation Confirming the Conduct of Academic Competitions at GTU.
- Curriculum Vitae (CVs) of Academic and Invited Personnel.
- Interview Results.

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 that the workload scheme reflects the full workload of both academic and invited staff,	None

[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 the scientific workload assigned to academic personnel, and that the existing inconsistencies be corrected. • It is also recommended that the university and faculty administration, in consultation with academic staff, analyze indicators related to scientific publications and plan appropriate measures to enhance academic personnel's research activities and, accordingly, improve their international visibility.	
Programme 1 Russian-language educational program "Oil and Gas Technologies", Bachelor's degree	None	None
Programme 2 Russian-language educational program "Oil and Gas Technologies", Master's degree	None	None

Evaluation

Please, evaluate the compliance of the programmes with the component

Component 4.1 Human Resources	Evaluation
Programme 1 Russian-language educational program "Oil and Gas Technologies", Bachelor's degree	Substantially
Programme 2 Russian-language educational program "Oil and Gas Technologies", Master's degree	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

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 2 (Russian-language educational program "Oil and Gas Technologies", Master's degree)

The Georgian Technical University has developed a regulation on Master's studies. According to this regulation, a Master's thesis supervisor may be a Professor, Associate Professor, Assistant Professor, invited academic staff/member (a person holding a Doctoral degree), Emeritus Professor, or a senior or principal research fellow holding a Doctoral degree from the relevant academic department of GTU.

A Master's thesis supervisor may also be an employee holding a Doctoral degree from another institution, provided there is a signed agreement or memorandum between GTU and that institution.

The supervisor is responsible for guiding the student in preparing the Master's thesis and supporting the student up to the defense. Since the launch of the program in 2022, only one Master's thesis has been defended.

The Head of the Sectoral Department is responsible for organizing working meetings between potential supervisors and Master's students. During these meetings, thesis topic selection is discussed, taking into account students' academic and research interests.

The academic staff involved in the Master's program possess the appropriate knowledge and skills to supervise Master's theses. The qualifications of potential supervisors are confirmed by their educational, scientific, and practical experience.

Programme 2 (Russian-language educational program "Oil and Gas Technologies", Master's degree)[15]			
Number of supervisors of Master's/Doctoral theses	**These supervisors**	**Including the supervisors holding PhD degree in the sectoral direction[16]**	**Among them, the affiliated academic staff**
Number of supervisors of Master's/Doctoral theses	**8**	**8**	**8**
- Professor	3	3	3
- Associate Professor	5	5	5
- Assistant-Professor			
Invited Staff			–
Scientific Staff			–
Including International Staff			

Evidences/Indicators

- GTU Regulation on Master's Studies;
- Curriculum Vitae (CVs) of Academic Staff;
- Interview Results.

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

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

[16] Theses supervisors having a PhD degree relevant to the qualification awarded by the educational programme.

		cluster. Also, please indicate, according to individual programs (if any)
General recommendations/ Suggestion of the Cluster	None	None
Programme 1 (name, level)		
Programme 2 Russian-language educational program "Oil and Gas Technologies", Master's degree	None	None

Evaluation

Please, evaluate the compliance of the programmes with the component

Component 4.2 Qualification of Supervisors of Master's and Doctoral Students	**Evaluation**
Programme 1 (name, level)	Select Appropriate
Programme 2 Russian-language educational program "Oil and Gas Technologies", Master's degree	Complies

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

According to the submitted documents, the University systematically conducts evaluations and satisfaction surveys of the academic, scientific and invited staff involved in the programs. As it was said during the interviews, these assessments are not only regularly implemented but also actively used to identify development needs and plan targeted support activities.

As the submitted documents state, staff development is closely connected to the University's efforts to promote international mobility, which is seen as a key mechanism for strengthening academic culture and institutional capacity. Interviewees confirmed that mobility schemes funded through European Commission projects have played a substantial role in providing academic and administrative staff with opportunities for professional exchange.

The submitted documentation indicates that the University has established the necessary material and infrastructural conditions to support scientific, research and creative activities carried out by academic, scientific and invited personnel. As it was said during the interviews, these resources are essential for enabling staff to undertake research and fulfil program objectives. The effectiveness of staff performance-particularly within the Faculty of Mining and Geology-is also monitored through faculty-level indicators, including student engagement and the overall academic achievements of the faculty.

As the submitted documents state, the University's human resource management framework outlines clear rules for employee performance evaluation and professional development. Interviewees highlighted the role of faculty commissions, established by Rector's orders, which systematically assess the quality of teaching through class observations and documentation review. These commissions, led by the Faculty Quality Assurance Service, prepare formal reports that inform further actions aimed at improving teaching quality and ensuring alignment with program requirements.

The documentation submitted by the University confirms that scientific and research achievements of academic staff are collected and reviewed annually. As noted during the interviews, the process involves the Deputy Dean and the Dean's Office specialists, who coordinate the submission and analysis of staff research outputs.

As the submitted documents state, several institutional mechanisms are in place to stimulate the professional development of academic, scientific and invited personnel. The internal regulations provide transparent procedures for recruitment and promotion, ensuring that only candidates who demonstrate ongoing professional engagement and development can qualify for academic positions. Interviewees emphasized that qualification requirements are closely aligned with legal standards and job descriptions, preventing advancement without evidence of continuous professional growth.

The submitted evidence also indicates that the University actively encourages staff participation in qualification courses, trainings and seminars, an aspect repeatedly confirmed during the interviews. The Professional Development Center plays a central role in offering training on modern teaching methodologies, assessment practices and career planning. Additional initiatives, such as the electronic library training conducted in 2024, further strengthen staff competencies in accessing digital resources and using international research databases-skills essential for effective engagement in e-learning and research activities.

As the submitted documents state, institutional support for research funding and grant participation is provided through the Grants Service Office, which assists staff and students in identifying funding opportunities, preparing applications and managing awarded grants. Interviewees noted that this unit has significantly enhanced staff involvement in international projects and improved compliance with donor requirements. The existence of an organized system for grant administration has contributed to higher levels of engagement in research across faculties. The expert team double checked during the interviews with the faculty members and they confirmed to have been aware of the grant program, as well as incentives for publications.

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

- Self-evaluation report,
- GTU Grants Service Office
- Documentation confirming international cooperation
- Rules for evaluating the scientific and research activities of the scientific and research unit of GTU
- Interviews during the site-visit
- University webpage

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 Russian-language educational program "Oil and Gas Technologies", Bachelor's degree	None	None
Programme 2 Russian-language educational program "Oil and Gas Technologies", Master's degree	None	None

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 Russian-language educational program "Oil and Gas Technologies", Bachelor's degree	Complies
Programme 2 Russian-language educational program "Oil and Gas Technologies", Master's degree	Complies

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 the 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

Description and Analysis of Cluster

The infrastructure and technical resources of the Georgian Technical University (GTU) support the implementation of the educational programs, learning outcomes and program goals are achieved.

The GTU Central Library provides the mandatory literature listed in all syllabi, with some minor refinement needed. Library usage rules are clearly displayed on-site and available online. The printed and electronic collections are diverse, updated in accordance with the latest developments. Though

improvement can be made with more diverse materials in English language. It is suggested to deliver more diverse materials in English language.

Students and faculty have access to reading rooms, meeting rooms, and group-work rooms; IT equipment and computers with Internet access. The integrated library system ensures efficient navigation and access to both print and electronic resources. Students and staff are informed about access rules and the conditions of use of the existing resources.

The university infrastructure provides uninterrupted electricity, heating, medical support, fire-safety systems, and evacuation plans on all floors.

There is availability of a wide range of specialized tools (drilling tools, rig models, packer systems) supports practical instruction though it needs renovation. Renovating these resources will ensure they remain current, functional, and aligned with modern industry practices. It is suggested to renovate specialized tools (for example: drilling tools, rig models, and packer systems).

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

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	None	It is suggested to deliver more diverse materials in English language. It is suggested to renovate specialized tools (for example: drilling tools, rig models, and packer systems)
Programme 1 Russian-language	None	None

educational program "Oil and Gas Technologies", Bachelor's degree		
Programme 2 Russian-language educational program "Oil and Gas Technologies", Master's degree	None	None

Evaluation

Please, evaluate the compliance of the programmes with the component

Component 4.4. Material Resources	Evaluation
Programme 1 Russian-language educational program "Oil and Gas Technologies", Bachelor's degree	Complies
Programme 2 Russian-language educational program "Oil and Gas Technologies", Master's degree	Complies

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

The budgeting procedure is well-defined and integrated within the faculty's financial planning system. The program's income and expected expenses: academic workload, laboratory resources, field practice costs, and program administration are calculated using established internal mechanisms.

The key funding source is stable and predictable within the context of GTU operations, as the program attracts both Georgian and international students.

The budgeting process incorporates the resource-intensive nature of an engineering and technology program in the oil and gas field. Laboratory equipment, software licensing, field training, and safety-related expenditures are accounted for, ensuring that the program's academic and practical components are adequately financed.

The annual budget undergoes review and approval by the GTU Representative Council. This ensures compliance with institutional financial regulations.

the Russian-language Bachelor's Educational Program "Oil and Gas Technology" has: Stable and diversified funding sources – tuition income from multiple enrollment streams; Structured budgeting; procedures – annual financial planning conducted by the faculty and approved institutionally; Adequate provision of program-specific resources –it will be good practice to renew practical equipment.

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

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 Russian-language educational program "Oil and Gas Technologies", Bachelor's degree	None	None
Programme 2 Russian-language educational program "Oil and Gas Technologies", Master's degree	None	None

Evaluation

Component 4.5. Programme/Faculty/School Budget and Programme Financial Sustainability	Evaluation
Programme 1 Russian-language educational program "Oil and Gas Technologies", Bachelor's degree	Complies
Programme 2 Russian-language educational program "Oil and Gas Technologies", Master's degree	Complies

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

As the submitted documents show, the QA system at the Georgian Technical University (GTU) is designed as an integral part of the university's management cycle - planning, implementation, monitoring, and improvement - and functions in alignment with the institution's mission, strategic development plan, and regulatory framework. It is grounded in the core principles and standards guiding the university's daily operations and aims to foster a strong institutional culture of quality. As it was mentioned during the interviews, the leadership demonstrates a consistent commitment to strengthening the QA function and embedding a culture of evidence-based decision-making across faculties.

At the Faculty of Mining and Geology, the Quality Assurance Service plays a central role in coordinating and supporting the implementation of the system. The submitted documents confirm that it regularly organizes informational and advisory meetings with academic staff to discuss updates related to the Bologna Process, authorization, and accreditation procedures. As it was emphasized during the interviews, the faculty actively uses internal evaluation tools and mechanisms developed by GTU to systematically assess the quality of educational and research activities, the adequacy of human and material resources, and the professional qualifications of personnel. Surveys and interviews are conducted among students, graduates, employers, and academic staff, and the resulting data are used to develop evidence-based recommendations aimed at enhancing teaching and learning quality.

The QA system operates according to the PDCA (Plan–Do–Check–Act) principle. During the planning stage, as documented in the self-evaluation report, the faculty defines objectives and methodologies for evaluation based on the analysis of institutional requirements and stakeholder expectations. Program evaluation commissions—composed of representatives from the faculty QA service, administration, academic staff, students, and graduates—are responsible for developing evaluation tools, procedures, and priorities for program enhancement. In the implementation phase, assessments are conducted in line with established standards and schedules, ensuring that teaching, research, and creative activities meet the required quality benchmarks. The checking stage focuses on

systematic monitoring, analyzing what works effectively and identifying challenges, while the acting phase involves summarizing findings, formulating recommendations, and launching new improvement cycles.

As the submitted materials indicate, GTU employs well-established internal mechanisms to ensure continuous improvement of teaching quality, effective utilization of academic and material resources, and systematic monitoring of educational programs. The university-wide QA Service coordinates these activities and ensures that quality improvement processes are consistently maintained. As it was stated during the interviews, feedback gathered from students, graduates, and employers serves as a primary basis for developing and adjusting improvement strategies.

Program planning and development at GTU follow the Rules for Planning, Development, Evaluation, and Improvement of Educational Programs approved by the Academic Council. Each program is developed by a dedicated working group comprising academic and research staff, administrative representatives, students, graduates, and employers. As the submitted documents show, this participatory approach ensures the continued relevance of programs and their alignment with institutional goals. Learning objectives and expected results are periodically reviewed to ensure consistency with the university's strategic direction, while the accuracy of student workload defined in ECTS credits is verified through data analysis. As it was noted during the interviews, although faculty members are involved in the program self-evaluation and improvement process, it would be suggested to further enhance their engagement-particularly in the stages of data interpretation, curriculum revision, and follow-up monitoring-to strengthen shared ownership and deepen the culture of internal quality assurance.

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

- Self-Evaluation Report
- Rules for planning, development, evaluation and development of educational programs.
- Regulations of the Georgian Technical University Quality Assurance Service.
- Internal quality assurance mechanisms approved by the resolution of the GTU Academic Council
- Interviews during the site visit
- University Website

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 in the

	grouped in the cluster. Also, please indicate, according to individual programs (if any)	cluster. Also, please indicate, according to individual programs (if any)
General recommendations/ Suggestion of the Cluster	None	It would be suggested to further enhance faculty member's engagement-particularly in the stages of data interpretation, curriculum revision, and follow-up monitoring-to strengthen shared ownership and deepen the culture of internal quality assurance.
Programme 1 Russian-language educational program "Oil and Gas Technologies", Bachelor's degree	None	None
Programme 2 Russian-language educational program "Oil and Gas Technologies", Master's degree	None	None

Evaluation

Please, evaluate the compliance of the programmes with the component

Component 5.1. Internal Quality Evaluation	Evaluation
Programme 1 Russian-language educational program "Oil and Gas Technologies", Bachelor's degree	Complies
Programme 2 Russian-language educational program "Oil and Gas Technologies", Master's degree	Complies

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

As mentioned in the submitted documents, the Georgian Technical University (GTU) regularly utilizes the results of external quality assurance to enhance and develop its educational programs. The periodic external assessment of the "Oil and Gas Technology" bachelor's and master's degree programs involves graduates, employers, and other stakeholders in a systematic process of data collection, analysis, and discussion. As it was said during the interviews, the results of these assessments are actively used to refine program content, structure, and delivery methods. The university organizes periodic meetings and consultations during the program development phase, where the cluster of bachelor's and master's programs in "Oil and Gas Technologies" is jointly reviewed and discussed for accreditation purposes. This collaborative approach allows the faculty to ensure alignment with external feedback and accreditation standards while fostering continuous improvement based on analytical and qualitative data.

As mentioned in the submitted documents, the Faculty of Mining and Geology employs well-established external quality assurance mechanisms grounded in recognized international practices. External evaluations of both bachelor's and master's programs have involved expert feedback from foreign institutions such as the Azerbaijan State Oil and Industry University, the Azerbaijan Oil and Gas Institute, and Baku Oil and Gas University. In addition, local peer institutions-including Batumi State University, Tbilisi State University, and the Institute of Geophysics-have provided independent expert reviews. As it was said during the interviews, the faculty values these external perspectives, using them as an essential part of the developmental process. The recommendations from these institutions were carefully analyzed by the program development group, and based on their conclusions, several adjustments were made, including the development of new courses, revision of admission prerequisites, and modification of existing curricula.

As mentioned in the submitted documents, the programs also take into consideration recommendations received during national and international accreditation processes. The feedback provided by external experts during these reviews has directly informed the content, structure, and learning outcomes of the programs. As it was emphasized during the interviews, the university systematically discusses these recommendations within the relevant academic and administrative units to ensure they are adequately addressed. This approach demonstrates the institution's commitment to a culture of continuous improvement and responsiveness to external evaluation outcomes.

As mentioned in the submitted documents, the Faculty of Mining and Geology also engages in developmental peer review with both local and foreign experts to improve program quality and the research environment. As it was said during the interviews, these peer reviews are conducted through formal and informal channels, including collaborative consultations, workshops, and expert assessments. The process allows faculty members to benchmark their practices against international standards and receive feedback from peers working in other higher education and research institutions. This exchange contributes to enhancing the academic rigor and professional relevance of the programs, especially in fields closely tied to applied industry standards such as oil and gas technology.

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

- Self-Evaluation Report
- Rules for planning, development, evaluation and development of educational programs.
- Regulations of the Georgian Technical University Quality Assurance Service.
- Interviews during the site visit
- University Website

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 Russian-language educational program "Oil and Gas Technologies", Bachelor's degree	None	None
Programme 2 Russian-language educational program "Oil and Gas Technologies", Master's degree	None	None

Evaluation

Please, evaluate the compliance of the programmes with the component

Component 5.2. External Quality Evaluation	Evaluation
Programme 1 Russian-language educational program "Oil and Gas Technologies", Bachelor's degree	Complies
Programme 2 Russian-language educational program "Oil and Gas Technologies", Master's degree	Complies

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

As the submitted documents show, the Faculty of Mining and Geology systematically reviews its educational programs through the coordinated work of the Quality Assurance Service. The service periodically evaluates the programs' structure, content, and resource provision to ensure alignment with institutional and national standards. This review process is participatory and inclusive, involving students, academic and administrative staff, graduates, employers, and external specialists in the field. The feedback collected from these stakeholders serves as a basis for the development of targeted recommendations aimed at continuous program improvement.

As it was said during the interviews, the Quality Assurance Service collaborates closely with the Faculty Commission for the Evaluation of Educational Programs, which was established by the Rector's decree. This commission is responsible for reviewing the conformity of the programs to accreditation requirements, including teaching and learning resources, human capacity, and the quality of research and educational components. The Commission is authorized to request information and documentation from academic departments, and its findings are reported to both the Faculty Dean and the University Quality Assurance Service. Identified shortcomings are addressed through written recommendations, which are monitored for follow-up actions and improvements. The expert team double checked, and the university is conducting surveys to evaluate the supervisors work within the MA studies, students also confirmed to provide feedback on this.

As the submitted documents show, both bachelor's and master's programs in "Oil and Gas Technologies" undergo regular internal and external assessments. The Faculty Commission conducts periodic evaluations, while external experts and partner institutions from Georgia and abroad provide peer feedback. The recommendations received from these reviews have led to specific program improvements, such as revising admission prerequisites, updating course content, and developing new learning modules. Employers and industry partners—including senior representatives from the Georgian Oil and Gas Corporation and related companies—also contribute to program refinement by sharing practical insights and professional expectations.

As it was said during the interviews, the results of these evaluations are analyzed in a dynamic way to identify development trends. Based on the findings, the faculty develops recommendations to enhance teaching quality and program relevance. Input from local and international experts is used not only to refine the content of existing courses but also to align the curriculum with comparable international programs. The analysis of foreign models from Azerbaijan, Kazakhstan, the Czech Republic, and Cyprus demonstrates the faculty's commitment to benchmarking its programs against international standards and best practices in the field of oil and gas technology.

As it was said during the interviews, ongoing efforts are being made to enhance the alignment of the programs with international standards and to introduce innovations based on global trends in oil and gas education. Comparative studies of foreign programs, particularly those at Khazar University, Azerbaijan State Oil and Industry University, Nazarbayev University, Palacký University, and others, serve as important reference points in this process. The integration of international experience and the active engagement of external experts reflect a systematic approach to developmental peer review and program modernization.

As it was noted during the interviews, the university is currently working on creation of the peer assessment mechanism among faculty members. So far, this practice is based on voluntary.

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

- Self-Evaluation Report
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- Regulations of the Georgian Technical University Quality Assurance Service.
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- University Website

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 Russian-language educational program "Oil and Gas Technologies", Bachelor's degree	None	None
Programme 2 Russian-language educational program "Oil and Gas Technologies", Master's degree	None	None

Evaluation

Please, evaluate the compliance of the programmes with the component

Component 5.3. Programme Monitoring and Periodic Review	Evaluation
Programme 1 Russian-language educational program "Oil and Gas Technologies", Bachelor's degree	Complies
Programme 2 Russian-language educational program "Oil and Gas Technologies", Master's degree	Complies

Attached documentation (if applicable):

Signatures

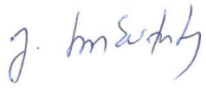
Chair of Accreditation Experts Panel

Retnanto Albertus

Of the member(s) of the Accreditation Experts Panel

Inga Bochoidze

Giorgi Robakidze



Giga Khositashvili

Tato Lapauri