

REPORT

about results of work of the external expert Commission for the assessment of conformity to Standards and guidance for international accreditation of foreign organizations of education and educational programs (based on ESG) accreditation of educational programs 09.03.02 "Information systems and technologies" of the "Grozny State Petroleum Technical University named after academician M. D. Millionshtchikov"

Date of on-line visit: from October 26 to October 28, 2021

INDEPENDENT ACCREDITATION AND RATING AGENCY

External Expert Commission

Addressed to the IAAR Accreditation Council



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(I) LIST OF DESIGNATIONS AND ABBREVIATIONS

IAAR - Independent Accreditation and Rating Agency

EEC - External Expert Commission

EP - Educational program

ESG – European Standards and Guidelines

FSBEI HE - Federal State Budgetary Educational Institution of Higher Education

IAAR – Independent agency for accreditation and rating

PhD – Doctor of Philosophy

RF – Russian Federation

GSOTU- Grozny State Oil Technical University

UNIVERSITY – Higher education institution

FL - Federal Law

Federal State Educational Standards of Higher Education - Federal State Educational

Standards of Higher Education

NCJSC - Non-commercial Joint Stock Company

TS – Teaching staff

IAIT - Institute of Applied Information Technology

RAS – Rating assessment system

IPRBooks – Intellectual property right books

ESS - Economic Security Service

ICC - Industrial and Civil construction

TCP - Technology of construction production

GED – General education disciplines

DB - Basic disciplines

PD - Profile disciplines

Housing and communal services - Housing and communal services

CR - Chechen Republic

JSC - Open Joint Stock Company

LLC – Limited Liability Company

Federal Target Program - Federal Target Program

QMS - Quality Management System

GOST R - National standards of the Russian Federation

ISO - International Organization for Standardization

DEMW - Department for Educational and Methodological Work

RIIAQE - Regulation on internal independent assessment of the quality of education

EPHP - Educational and Methodological Council

EPHE - Educational program of higher education

CED - Catalog of elective disciplines

ACTING - Acting (acting) duties

MEP - Modular educational program

EIEE - Electronic information and educational environment

RW - Research work

RWS – Research work of students

AS - Academy of Sciences

PR – Public Relations

SAC – State Attestation Commission

SEC - State Examination Commission

BSTU - Belarusian State Technological University

CRIIRAS - Comprehensive Research Institute of H. I. Ibragimov of the Russian Academy of Sciences

RFBR – Russian Foundation for Fundamental Research

UAE – United Arab Emirates

ICT- Information and communication technologies

EML - Educational and methodical literature

WoS – Web of Science

Scopus - Bibliographic and abstract database

NBDSC - National Bibliographic Database of Scientific Citation

CC - copyright certificates

LCADS - Laboratory of Computer-aided design systems

Mass media – mass media

UCS - United Council of Students

FEF - Fund of evaluation funds

MOOE - A massive open online course

IST - Information Systems and Technologies

RT - Republic of Tatarstan

(II) INTRODUCTION

In accordance with Order No. 120-21-OD dated 02.09.2021 of the Independent Agency for Accreditation and Rating (IAAR) from October 26 to 28, 2021. The External Expert Commission (EEC) conducted an online assessment of the compliance of the educational program EP 09.03.02 "Information Systems and Technologies" of the Grozny State Petroleum Technical University named after Academician M.D. Millionshchikov with the Standards and guidelines for international accreditation of foreign educational organizations and educational programs (based on ESG) of the NU "Independent Agency for Accreditation and Rating" (Nur-Sultan, 2018).

The report of the EEC contains an assessment of the compliance of the activities of the Grozny State Petroleum Technical University named after Academician M.D. Millionshchikov within the framework of international accreditation with the criteria of the IAAR, recommendations of the EEC on further improvement of the parameters of the specialized profile.

The composition of the EEC:

Chairman of the IAAR EEC - Belykh Yuri Eduardovich, Ph.D., Associate Professor, Vice-Rector of Yanka Kupala Grodno State University (Grodno, Republic of Belarus).

IAAR expert - Aldungarova Aliya Kairatovna, PhD, Associate Professor of Toraigyrov University (Pavlodar, Republic of Kazakhstan). Assessment of EP 08.03.01 – "Construction" orientation (profile) – "Industrial and civil construction".

IAAR expert - Ganagina Irina Gennadievna, Ph.D., Head of the Department of Space and Physical Geodesy, Siberian State University of Geosystems and Technologies (Novosibirsk, Russian Federation). Assessment OP 21.05.01 Applied geodesy, specialization "Engineering geodesy".

IAAR expert - Guzeva Tatiana Aleksandrovna, PhD, Associate Professor, Head of the Department of Educational Standards and Programs, Bauman Moscow State Technical University (Moscow, Russian Federation). Assessment EP 09.03.03 – "Applied informatics" orientation (profile) – "Applied informatics in economics".

IAAR expert - Grakovsky Alexander Vladimirovich, Professor of the Faculty of Computer Science and Electronics at the Institute of Transport and Communications (Riga, Latvia). *Evaluation of EP 09.03.02 "Information systems and technologies"*.

IAAR expert - Jamilam Abdulakhatovna Ismailova, PhD, Assistant Professor at the Institute of Geology and Oil and Gas Engineering of the K.I. Satpayev Kazakh National Research Technical University (Almaty, Republic of Kazakhstan). *Assessment EP 21.03.01 – "Oil and gas business" focus (profile) – "Operation and maintenance of oil production facilities".*

IAAR expert, employer - Uzayeva Aminat Alvievna, Head of the Construction Department of the Ministry of Construction and Housing and Communal Services of the Chechen Republic (Grozny, Chechen Republic of the Russian Federation).

IAAR expert, student - Egizbayeva Asylzat Yerkinkyzy, 1st year student of the educational program 7M06149 Information Systems of the Korkyt Ata Kyzylorda University (Kyzylorda, Republic of Kazakhstan). *Evaluation of EP 09.03.02 "Information systems and technologies"*.

IAAR expert, student - Kupzhanov Dias Serikovich, a 4th-year student of the Program of the School "Construction and Environmental Engineering" of Nazarbayev University (Nur-Sultan, Republic of Kazakhstan). *Assessment of EP 08.03.01 – "Construction" orientation (profile) – "Industrial and civil construction".*

IAAR expert, student - Platonova Elena Sergeevna, 4th year student EP 21.03.01 Oil and gas business (profile "Operation and maintenance of oil production facilities") Russian State University of Oil and Gas (Gubkin National Research University) (Moscow, Russian Federation). Assessment EP 21.03.01 – "Oil and gas business" focus (profile) – "Operation and maintenance of oil production facilities".

IAAR expert, student - Aliev Emir Shamil oglu, 4th year student of EP 050604 "Geophysics" of the Azerbaijan State University of Petroleum and Industry (Baku, Republic of Azerbaijan). Assessment EP 21.05.01 Applied geodesy, specialization "Engineering geodesy".

IAAR Coordinator - Guliyash Balkenovna Niyazova, Project Manager for the institutional and specialized accreditation of universities of the Independent Accreditation and Rating Agency (Nur-Sultan, Republic of Kazakhstan).

(III) REPRESENTATION OF THE EDUCATIONAL ORGANIZATION

FGBOU VO "Grozny State Oil Technical University named after academician M. D. Millionshchikov" (hereinafter FSBEI HE "GSOTU named after Acad. M. D. Millionshchikov", University) in the implementation of educational programs in areas of training carries <u>out its</u> <u>activities in accordance with:</u>

- The Federal law of December 29, 2012 No. 273-FL "On education in Russian Federation" (Federal law "On education in Russian Federation" dated 29.12.2012 N 273-FZ (latest edition) / ConsultantPlus (consultant.ru));
- Federal State Educational Standards of higher Education in the areas of training (FSES HE (3++) in the areas of bachelor's degree ECONOMICS AND MANAGEMENT (fgosvo.ru));
- Order of the Ministry of Education and Science of the Russian Federation No. 301 dated April 05, 2017 "On Approval of the Procedure for Organizing and Implementing educational activities for higher Education educational programs Bachelor's degree programs, specialty programs, Master's degree programs" (Order of the Ministry of Education and Science of the Russian Federation No. 301 dated April 5, 2017 "On Approval of the Procedure for Organizing and implementing educational activities for higher Education educational programs bachelor's degree programs, specialty programs, Master's degree programs" (not entered into force) (garant.ru));
- Normative and methodological documents of the Ministry of Science and Higher Education of the Russian Federation (Normative documents of the Ministry of Education and Science of the Russian Federation Orders (rzgmu.ru));
- The Charter of the University (appr. Order No. 967 on 16.11.2018, with changes in 10.01.2020 G. (order No. 7), 07.04.2020 G. (order No. 562), ustav_ggntu.pdf (gstou.ru), ustav_ggntu_izml.pdf (gstou.ru), ustav_ggntu_izml.pdf (gstou.ru);
- A certificate of state accreditation (No. 1731 from 10.03.2016 accredited to 10.03.2022 G., Svidetelstvo.pdf (gstou.ru)):
- Local regulations of the FGBOU VO "GGNTU named after Academician M.D. Millionshchikov" (Documents. FSBEI HE "GSOTU named after M.D. Millionshchikov" (gstou.ru)).
- The program of strategic development of the Federal State Educational Institution of Higher Education "GSOTU named after M.D. Millionshchikov" until 2030 (approved by the Rector on 02.09.2021, Protocol No. 1).

FSBEI HE "GSOTU named after Academician M.D. Millionshchikov" is a higher educational institution established for the implementation of educational, scientific, social and other non-commercial functions. The main activities of the University are educational, research, and social activities.

<u>The mission</u> of the FSBEI HE "GSOTU named after Academician M.D. Millionshchikov" includes five main components: educational, scientific, cultural, innovative, entrepreneurial.

<u>International cooperation</u>. The University cooperates with foreign educational organizations: Al-Mustaqbal University (Iraq), Damascus University (Syrian Arab Republic), Gaziantep University (Turkey), Hanguk University of Foreign Languages, Hanyong College, Hanyang University of International Relations, Global University in Pohang (South Korea), NAO "M. Auezov South Kazakhstan University" (Republic of Kazakhstan).

<u>The history of the formation</u> of the FSBEI HE "GSOTU named after Academician M.D. Millionshchikov":

1920 - Higher Oil College;

1922 - Oil Practical Institute;

1929 - Grozny Oil Institute;

1973 - Grozny Oil Institute named after academician M.D. Millionshchikov;

- 2002 State Educational Institution of Higher Professional Education "Grozny State Oil Institute named after Academician M.D. Millionshchikov"
- 2011 Federal State Budgetary Educational Institution of Higher Professional Education "Grozny State Oil Technical University named after Academician M.D. Millionshchikov";
- 2015 Federal State Budgetary Educational Institution of Higher Education "Grozny State Oil Technical University named after Academician M.D. Millionshchikov".

<u>The title document of the university</u> is the License for educational activities No. 1505 19.06.2015, series 90L01 No. 0008503 (validity period - indefinitely).

<u>The current status of the University's accreditation</u> is certified by the Certificate of State Accreditation dated March 10, 2016, registration number 1731 series 90A01 No. 0001824 (valid until March 10, 2022).

At the university, the educational process is carried out according to a multi-stage system: bachelor's degree, specialty, master's degree and postgraduate studies. The educational process is fully implemented on the basis of a credit training system.

<u>The university structure</u> includes 5 institutes (applied information technologies, oil and gas, digital economy and technological entrepreneurship, construction, architecture and design, energy), the Institute of Advanced Training and Retraining, the Faculty of Secondary Vocational Education, lyceum, preparatory department for foreign citizens, vocational training center, distance and e-learning center. In addition, there are a scientific and technical library (5 departments), sports facilities (sports palace, gyms, football field, volleyball and basketball fields, etc.), 5 canteens with a total area of 1196.8 sq.m for 368 seats, a health center, etc.

The staff of the university is represented by the following categories of employees: the head of the educational organization (rector, chairman of the Academic Council) – 1, deputy heads of the educational organization (vice-rectors) - 5, teaching staff - 339, including doctors of sciences – 43, candidates of sciences - 181. Settling down at the university is 66%, the average age of university teaching staff is 47 years (https://gstou.ru/files/localnie_akti/Otchet_o_samoobsledovanii_GSOTU_2020.pdf).

<u>The contingent of students</u> as of 01.10.2021 (for all implemented educational programs): full-time education – 3359; part-time education - 4094 students.

<u>Library resources</u>. The University has 5 departments of the scientific and technical library: the department of educational and scientific literature with the sector of electronic resources, the department of educational and scientific literature, the service department with a reading room, a common reading room with the sector of electronic resources, the total area of which is 37 sq.m. for 110 seats (<u>Logistics and equipment of the educational process</u>. FSBEI HE "GSOTU named after M.D. Millionshchikov" (gstou.ru). The University has an electronic library system IPRbooks (license agreement No. 8048/21 until 01.07.2022), Lan (SEB Agreement NV-247 until 31.12.2023), a multidisciplinary educational resource "Student Consultant", which contains full-text scientific, educational and teaching materials. The volume of the library fund as of 01.10.2021 on physical (material media) is 124765 copies, of which educational publications - 104342 copies, scientific publications - 20423 copies. By subscription, the library has 1245 copies and 1042 copies available, names of magazines and newspapers. On electronic media 17245 copies, audio-visual documents - 1042 copies.

Brief description of the accredited EP 09.03.02 "Information systems and technologies"

The implementation of the EP is carried out by the Institute of Applied Information Technologies (IPIT), the Department of Information Technology (hereinafter IT), which was founded on October 1, 2009, having separated from the Department of General Informatics.

<u>The forms of study</u> are full-time and part-time, the terms of study are 4 and 5 years, respectively. The implementation of the EP is carried out in Russian.

<u>Previous accreditation</u>: Certificate of State accreditation issued by the Federal Service for Supervision of Education and Science No. 1731 dated March 10, 2016, series 90A01 No. 0001824, valid until 03/10/2022.

The staff of the Department of "Information Technology".

Total number of teachers 01.10.2021 G., EP serving: total - 28, including 13 doctors and candidates of Sciences, PhD - 46 %.

<u>The contingent of students</u> 09.03.02 "Information systems and technologies" of education (full-time/part-time): 2016-2017 academic year 105/0, 2017-2018 academic year 65/13, 2018-2019 academic year -60/41, 2019-2020 academic year 59/113, 2020-2021 academic year 107/165, 2021-2022 academic year -180/200 students.

The purpose of the EP is the formation of universal, general professional competencies in accordance with the requirements of the Federal State Educational Standard in the direction of 09.03.02 "Information systems and Technologies", the formation of professional competencies taking into account professional standards corresponding to the professional activities of graduates; preparing graduates to solve production, technological and design tasks of professional activity in the field of research, development, implementation and maintenance of information technologies and systems.

<u>Employment of graduates</u> of the last 5 years under the accredited EP 09.03.02 "Information systems and technologies": 2016 - 75%, 2017 - 81%, 2018 - 90%, 2019 - 95%, 2020 - 67% (from 2020: correspondence – 75%).

Upon graduation, graduates are employed in organizations and institutions: Ministries and departments of the Chechen Republic (Ministry of Finance, Ministry of Transport and Communications, Ministry of Education and Science of the Chechen Republic, Ministry of Physical Culture, Sports and Youth Policy, Pension Fund); Educational organizations of the Chechen Republic (IRO of the Chechen Republic, GSOTU, ChGPU, ChGU, RCOI USE and MKO, colleges, schools, etc.); Management of the Judicial Department in the Chechen Republic; Federal Treasury Department of the Chechen Republic; Information and analytical centers; Commercial banks of the Chechen Republic (Branch of the National Bank of the Chechen Republic, Minbank, Sberbank, Post Bank); Joint-stock companies (Vainakh-Telecom, Chechenenergo, Rosselkhoznadzor); Chechen Mineral Waters LLC; Sheikh Zayed Foundation; Gazprom Mezhregiongaz Grozny LLC; Small and medium business of the Chechen Republic, etc. Graduates of the EP have the opportunity to continue their studies in the master's program within the enlarged group of specialties and areas of training.

<u>Academic mobility</u> according to the accredited OP for the period 2016-2021 is absent. The number of foreign students of the EP: 2019 -2, 2020 - 2.

Scientific directions of EP 09.03.02 "Information systems and technologies":

- formation of information competence of scientific and pedagogical personnel of a technical university in an information and educational environment,
- multimedia technology education,
- information security of social systems,

• theoretical foundations of the development of an integrated information environment in the enterprise.

(IV) DESCRIPTION OF THE PREVIOUS ACCREDITATION PROCEDURE

The educational program 09.03.02 "Information systems and Technologies" is accredited in the IAAR for the first time.

(V) DESCRIPTION OF THE VEC VISIT

The work of the EEC was carried out on the basis of the approved Program of the on-line visit of the external expert commission for international program accreditation of educational programs of the Grozny State Oil Technical University named after Academician M.D. Millionshchikov in the period from October 26 to 28, 2021.

In order to coordinate the work of the EEC, an on-line meeting was held on 21.10.2021, during which powers were distributed among the members of the commission, the schedule of the visit was clarified, and an agreement was reached on the choice of examination methods.

In order to obtain objective information on the evaluation of the university's activities, the members of the EEC used such methods as studying documentation, visual online inspection, observation, interviewing employees of various structural divisions, teachers, students, graduates and employers, questioning the teaching staff, students.

To obtain objective information about the quality of educational programs and the entire infrastructure of the university, to clarify the content of self-assessment reports, online meetings were held with the Rector, vice-rectors of the university in areas of activity, heads of structural divisions, directors of institutes, heads of departments, teachers, students, graduates, employers. A total of 35 representatives took part in the meetings (Table 1).

Table 1 - Information about employees and students who took part in meetings with VEK NAAR:

Category of participants	Quantity
Rector	1
Vice - Rectors	5
Heads of structural divisions	8
Directors of institutes	5
Heads of departments	5
Teachers	4
Students	4
Graduates	2
Employers	1
Total	35

During the online tour, the members of the EEC got acquainted with the state of the <u>material</u> <u>and technical base</u> through a video file, which presents the educational and lecture halls of the university, the regional competence center for digital economy, the innovation center "Highpark", the vocational training center, the laboratories of information technology, physics, general and non-mechanical chemistry, the laboratory of mechanics and molecular physics, the scientific and technical center for collective use "Modern Building Materials and Technologies", a dormitory, sports clubs, etc.

At the online meeting of the EEC IAAR with the university's target groups, the mechanisms for implementing the university's policy were clarified and the specification of individual data presented in the university self-assessment report was carried out.

During the accreditation period, classes of students of the accredited EP were attended:

- 1. Presentation of knowledge in IP (art. Shabazov I.M., lecture);
- 2. IT project management (art. Magomaev T.R., lecture);
- 3. Applied computer science. Digital systems and technologies in economics and management (Akhmadova L.L., laboratory work).

The EEC experts watched videos about the practice base, as well as online questions were asked to the heads of the following partner organizations: GBU "Medical Information and Analytical Center" and Exposision LLC.

In accordance with the accreditation procedure, an online survey of 53 teachers and 42 students was conducted.

In order to confirm the information provided in the Self-assessment Report, external experts requested and analyzed the working documentation of the university. Along with this, the experts studied the Internet positioning of the university through the official website of the university (https://gstou.ru/).

As part of the planned program, recommendations for improving the accredited educational program of the Grozny State Oil Technical University named after Academician M.D. Millionshchikov, developed by the EEC based on the results of the examination, were presented at an online meeting with the management on 10/28/2021.

(VI) COMPLIANCE WITH INTERNATIONAL PROGRAM ACCREDITATION STANDARDS

6.1. ESG. Part 1. Standard "QUALITY ASSURANCE POLICY"

An educational organization should have a published quality assurance policy that is part of their strategic management. Internal stakeholders should develop and implement this policy through appropriate structures and processes involving external stakeholders.

The evidentiary part:

Within the framework of strategic development to ensure the quality of educational and other activities in 2019, the process of developing a QMS in accordance with the national standard of the Russian Federation QMS – GOST R ISO 9001-2015 "Quality management systems. Requirements. (ISO 9001-2015)».

The internal system for assessing the quality of education of the University is part of the quality management system of education, which is represented by a set of regulatory documents: internal regulations, regulations, orders, regulations and other local regulations, publicly available on the University's website (Documents. FSBEI HE "GSOTU named after M.D. Millionshchikov" (gstou.ru).

The coordinating function in the quality assessment system of education at GSOTU is performed by the Department for Educational and Methodological Work (hereinafter - DEMW), which developed the "Regulation on internal independent assessment of the quality of education (hereinafter - RIIAQE)" (approved by the First Vice-Rector of GSOTU at the meeting of the UMS

on 26.06.2021, Protocol No. 10). The regulation has been developed in accordance with the Methodological Recommendations on the organization and conduct of an internal independent assessment of the quality of education in educational institutions of higher education for educational programs of higher education - bachelor's degree programs, specialty programs and master's degree programs (letter dated 02/15/2018 No. 05-436) and with the regulations of the Russian Federation. Internal stakeholders, that is, all academic departments of the university, take part in the implementation of activities on the RIIAQE.

The objects of the RIIAQE are the achievements of students in the process of mastering educational programs, scientific and pedagogical workers, their professional competence, the organization of the educational process.

The main subjects of the RIIAQE are students and graduates of the University, parents (legal representatives) of underage students, scientific and pedagogical staff of the University, administrative and managerial staff of the University, representatives of specialized and public organizations and enterprises.

The university carries out an independent assessment of the quality of training of students within the framework of:

- current, mid-term and intermediate certification of students in disciplines (modules);
- intermediate certification of students based on the results of practical training;
- intermediate certification of students based on the results of course work and projects, as well as participation in project activities;
- conducting entrance control of the level of readiness of students at the beginning of the study of the discipline (module);
- measures to control whether students have formed learning outcomes in previously studied disciplines (modules);
- state final certification of students.

An internal independent assessment of the quality of the work of the university teaching staff involved in the implementation of the EPHE is carried out within the framework of:

- conducting competitions of pedagogical skills;
- system monitoring of the qualification level of teaching staff;
- analysis of the portfolio of professional achievements of teaching staff;
- procedures for assessing the quality of work of teaching staff by students.

The following methodology is used to account for the results of internal RIIAQE:

- 1. Based on the results of the activities carried out within the framework of the internal RIIAQE, the analysis of the collected information is carried out both at the level of heads of departments and at the level of university management with the participation of the director of the DEMW.
- 2. Based on the analysis, an action plan is developed collectively to eliminate the identified violations and shortcomings and further improve the quality of the educational process. The plan contains a list of measures, the timing of their execution, the names of the departments responsible for their execution, as well as a description of the planned results. The action plan is publicly available on the official website of the University to provide an opportunity for all interested parties to familiarize themselves with it.
- 3. The heads of the structural divisions listed in the plan (officials) take measures to implement the measures prescribed by the plan and submit a report to the DEMW based on the results of the work.
- 4. The Director of the DEMW organizes an audit of the implementation of the measures specified in the plan and analyzes the reports of the heads of structural divisions (officials) responsible for their implementation.

- 5. As the action plan is implemented, if necessary, its correction is carried out.
- 6. Based on the results of the implementation of the action plan, the director of the DEMW forms a final report and submits it to the first vice-rector of the university.

"The Regulation on the intra-university system of monitoring the quality of education" was developed on the basis of:

- Federal Law No. 273-FL of 29.12.2012 "On Education in the Russian Federation";
- Federal State Educational Standards of Higher Education;
- Charter of the GSOTU named after M.D. Millionshchikov;
- Regulations on the procedure for the organization and implementation of educational activities for educational programs of higher education - bachelor's degree programs, specialty programs, master's degree programs at the GSOTU named after M.D. Millionshchikov.

The monitoring system provides for the solution of the following tasks:

- collection, accounting, analysis and control of the organization, planning and implementation of educational, scientific, educational processes, their provision with documentation and methodological materials;
- organization of current, planned, complex, thematic and other types and forms of control
 of the results of educational, scientific, educational processes at various stages;
- analysis and evaluation of the effectiveness of the results of the activities of the teaching staff, administrative, managerial and support staff for the organization, provision and implementation of the educational process;
- formation of proposals for the improvement and development of all the constituent elements of the educational process of the university. The structure of the monitoring system of the educational process and the quality of education consists of two subsystems: external and internal.

Elements of the external evaluation system include with the participation of both internal and external stakeholders:

- federal monitoring of the effectiveness of universities, providing an assessment of the fulfillment of consumer requirements in the person of the state;
- state accreditation, the purpose of which is to establish compliance of the content, the level of quality of graduate training with the requirements of federal state educational standards (hereinafter referred to as the Federal State Educational Standard);
- the state final certification of graduates, the purpose of which is to assess the quality of
 mastering the basic educational program by graduates, to establish the level of training of
 university graduates to perform professional tasks and compliance of their training with
 the requirements of the Federal State Educational Standard.

The internal evaluation system includes:

- self-examination procedures, the purpose of which is to analyze the activities of the University, develop recommendations to eliminate inconsistencies in procedures, processes and the content of the quality of education;
- internal quality audit, organized for the purpose of systematic and independent analysis of the quality management system and allowing to determine the compliance of the university's activities and results in the field of quality;
- rating assessment of the activity of the teaching staff, formed on the basis of an information base that comprehensively reflects the educational, methodological and pedagogical activities of university teachers;
- rating assessment of the effectiveness of institutes and departments in the implementation of educational programs;

- entrance quality control of the preparation of applicants, the purpose of which is to assess
 the level of preparedness of applicants, the development of a system that promotes
 additional training of first-year students, its improvement in accordance with the level of
 requirements of the university;
- mid-term, intermediate attestations and ongoing control, the purpose of which is to assess the level of mastering by students of the contents of training courses;
- final certification, which is carried out in order to assess the level of professional and personal competence of the graduate, his readiness for creative and professional activity, readiness for professional growth.

The control measures of the monitoring system are systematic, planned, operational, coordinated, and cover all structural divisions of the university. The results of monitoring control measures are presented in the forms of analytical reports, reports, memos, etc. The analytical material contains a statement of facts, conclusions and, if necessary, suggestions for improving the quality of the educational process. Management decisions are made based on the results of the control, depending on its level, goals and objectives. The results of the control are the basis for: organizing and carrying out corrective and preventive actions, actions to improve the quality of the educational process at the university, planning the activities of the university for the appropriate period, attestation and evaluation of the effectiveness of the work of teaching staff and scientific and pedagogical workers, administrative and managerial personnel.

Improving the quality of the EP by updating them is ensured by changing the internal content of the EP, namely, adjusting the QED and its content, practice programs and topics of final qualifying works in terms of individual tasks for students for targeted practical training and performing demanded scientific research at the request of potential employers and state executive authorities, etc. When approving new EP, recommendations compiled based on the analysis of the latest scientific achievements, training and evaluation activities, opinions of internal and external stakeholders are taken into account (see examples):

- Protocol No. 1 of the meeting of the IT Department dated 30.08.2018. The issue of considering issues on updating, correcting, revising the EP 09.03.02 "Information Systems and Technologies" in connection with the beginning of the new academic year.
- Protocol No. 8 of the meeting of the Department of "IP" dated 20.05.2021.
 Consideration of issues of coordination and approval of the EP 09.03.02 "Information systems and technologies".
- Extract from the protocol of the meeting of the Academic Council of IAIT No. 1 dated 05.09.2020. The issue of approving the development plan of EP 09.03.02 "Information systems and technologies.
- Extract from the protocol of the meeting of the Academic Council of GSOTU No. 1 dated 02.09.2021. The issue of amendments to the EP 09.03.02 "Information systems and Technologies" and its updating.

The conclusions of the EEC on this standard were confirmed in reports and dialogues held at meetings with the administration and management of GSOTU departments:

- Interview with the Rector of GSOTU dated 26.10.2021
- Interview with the vice-rectors of GSOTU from 26.10.2021.
- Interview with the heads of structural divisions of GSOTU from 26.10.2021
- Interview with the directors of the institutes of GSOTU dated 26.10.2021.
- Interview with the heads of departments of GSOTU from 26.10.2021

Analytical part:

<u>Quality policy</u>. The process of monitoring and evaluating the quality of educational activities of the university is described in a set of the following corporate regulatory documents published on the University's web portal:

- Regulations on the intra-university system for monitoring the quality of education, approved by the Rector of the Grozny State Oil Technical University named after Academician M.D. Millionshchikov M.Sh. Mintsaev on 09/24/2020.;
- The Regulation on the internal independent assessment of the quality of education, approved by the first Vice-rector of the Grozny State Oil Technical University named after Academician M.D. Millionshchikov I.G. Gayrabekov on 26.06.2021.;

<u>However</u>, having the process of implementing the policy in the field of education quality at the Grozny State Oil Technical University named after Academician M.D. Millionshchikov, there is no documented existence of a developed Policy involving external stakeholders in the development, with the definition of goals and objectives, on the basis of which all Provisions for its implementation, including the University Development Strategy, should be developed.

Risk management. The program of strategic development of the Moscow State Technical University named after M.D. Millionshchikov until 2030 contains a description of the activities and tasks for their development: educational, research and innovation, international and internationalization, digital transformation, human resources development, communication and reputation management, socio-economic development of the region, financial stability, management and responsibility structure. However, the Development Strategy of GSOTU does not provide in its content an assessment of risks and ways to prevent them in the implementation of all areas of the university's activities. Accordingly, the experts of the EEC noted the lack of targeted actions on the part of the management of the EP in terms of forecasting risks during the implementation of the EP and the lack of mechanisms for their prevention and elimination.

Recommendations for EP 09.03.02 "Information systems and technologies":

- The management of the university, by the beginning of the 2022-2023 academic year, to develop, with the participation of external stakeholders, approve, implement and publish the Quality Assurance Policy of the university, which should be coordinated with the overall Development Strategy of the University.
- The management of the university, to analyze and systematize the impact of risks on the activities of the university. Based on the analysis, develop a long-term plan (for 5 years) to prevent and overcome risks by the end of the current academic year, in order to improve the university's activities and improve the quality of educational services and to begin its implementation from 2022-2023 academic year.
- The management of the University, IPIT and the IT Department to develop and implement a set of information measures to popularize the programs of academic mobility of students and teachers and their impact on improving the quality of education.
- The management of EP 09.03.02 "Information Systems and Technologies" should include
 in the department's work plan a section with the assessment and management of possible
 risks in the implementation of EP, indicating the possible consequences in case of non-

acceptance and (or) timely response measures, as well as a description of risk management mechanisms and measures and begin its implementation from 2022-2023 academic year.

The conclusion of the EEC according to the criterion of the standard "Quality Assurance Policy" for EP 09.03.02 "Information systems and technologies" requires improvement.

6.2. ESG. Part 1. The Standard "DEVELOPMENT AND APPROVAL OF THE PROGRAM"

An educational organization should have mechanisms for developing and approving its programs. Programs should be designed in accordance with the set goals, including the expected learning outcomes. The qualifications obtained as a result of mastering the program should be clearly defined, as well as explained, and should correspond to a certain level of the national qualifications framework in higher education and, consequently, the qualifications framework in the European Higher Education Area.

The evidentiary part:

The university has mechanisms for the development and approval of the EP.

The University has defined the procedures for the development of the EP and their approval at the institutional level, as well as the procedure for the examination of the EP, which is confirmed by the following documents:

- Regulations on the procedure for the development and approval of educational programs of higher education (approved by the First Vice-Rector on 21.04.2021, Protocol No. 2).
- Regulations on the procedure for developing, approving and making changes to curricula (approved by the Acting Rector on 08.11.2018, Protocol No. 2).
- Methodological recommendations for the development of adapted educational programs of higher education for persons with disabilities and the disabled, and their implementation (approved by the Rector on 29.10.2020)
- Methodological recommendations for the development of the work program of the discipline of higher education of FSES3++ (approved by the Rector on 21.04.2021, Protocol No. 3).
- Regulation on the procedure for the development and approval of educational programs of higher education of FSES3++ (approved by the Rector on 21.04.2021, Protocol No. 3).
- Regulations on the procedure for developing, approving and making changes to curricula developed in accordance with the Federal State Educational Standard 3++ (approved by the Rector on 21.04.2021, Protocol No. 2).

The accredited EP 09.03.02 "Information Systems and Technologies", implemented by the University, was developed in accordance with the federal state educational standards of higher education of the Federal State Educational Standard of Higher Education and taking into account the requirements of relevant professional standards. The structure of the EP provides for various types of activities corresponding to the results of training: technological, project, organizational and managerial. The types of activities provided for by the content of the EP are given in the curricula, work programs of the disciplines, as well as in the educational and methodological complexes of the disciplines.

09.03.02 "Information Systems and Technologies" operates in accordance with the goals, objectives and prospects of the national education system.

The purpose of EP 09.03.02 "Information systems and Technologies" is the academic and professional training of bachelors in the field of formation of universal, general professional

competencies in accordance with the requirements of the Federal State Educational Standard in this area, the formation of professional competencies taking into account professional standards corresponding to the professional activities of graduates; preparing graduates to solve production, technological and design tasks of professional activity in the field of research, development, implementation and maintenance of information technologies and systems.

The results of the training 09.03.02 "Information systems and technologies" are determined by the acquired competencies, which are prescribed in the developed models of graduates. A graduate who has mastered the bachelor's degree program must have universal, general professional and professional competencies.

The qualification obtained as a result of mastering the Bachelor's degree program corresponds to the level of the national qualifications framework in higher education and the qualifications framework in the European Higher Education Area.

For the development, approval and revision of the EP 09.03.02 "Information Systems and Technologies", external reviewers were involved: A.A. Israilova (Director of the GBU "Medical Information and Analytical Center"), Zh.A. Ayupova (General Director of the State Unitary Enterprise "Center for Information Technologies"), Z.A. Dadasheva (Deputy Director of ATR-Group LLC). External reviewers are also representatives for the approval of the MEP. Amendments to the EP were made with representatives of the Employers' Council (Extract from the minutes of the meeting of the Employers' Council of GSOTU No. 2 dated 03.06.2021 The question of compliance of the quality of the EP with the requirements of the modern labor market.).

At the graduating department, the state of science and technology is systematically monitored during the implementation of the EP, which allows timely changes to the MEP (for example, protocol No. 1 of the meeting of the IT Department dated 30.08.2018). Consideration of issues to improve the quality of the content of the EP 09.03.02 "Information systems and technologies" based on the results of meetings of the Employers' Council (addition and updating of courses of specialized disciplines in accordance with the development of modern technologies, for example, the content of a number of disciplines has been revised, a new type of practice has been added (production design and technological practice).

The audit of the EP is conducted annually at the end of the calendar year in the form of a survey of students, teachers and graduates of the University, employers. In addition, the department annually develops a self-examination report, which includes an analysis of the implementation of the EP at the end of each semester

The conclusions of the EEC on this standard were confirmed in reports and dialogues held at meetings with the administration and management of GSOTU departments:

- Interview with the rector of GSOTU dated 26.10.2021;
- Meeting with the vice-rectors of GSOTU dated 26.10.2021.;
- Meeting with the heads of structural divisions of GSOTU from 10/26/2021;
- Interview with directors of institutes from 10/26/2021;
- Interview with heads of departments from 10/26/2021;
- Interview with students of EP from 10/27/2021;
- Interview with employers of EP from 10/27/2021.

The results of the survey showed that the teaching staff are satisfied:

- the content of the educational program 100 %;
- the attention of the management of the educational institution to the content of the educational program 100 %;
- formation of educational programs for students to be able to analyze situations and make forecasts 100 %;

- <u>Students</u> assessed how much they agree that the taught material is relevant: 64.3% - full agreement, 28.6% - agree, 7.1% - partially agree.

Analytical part:

The model of EP formation is a process one, which assumes:

- obtaining, at the initial stage, the graduate's competence model proposed by external stakeholders, the graduates' assessment of the acquired knowledge, skills and abilities within the framework of work functions, the wishes of students;
- accumulation by the working group of the teaching staff of the information received for comparison with the competencies contained in the Federal State Educational Standard and the formation of a draft curriculum, which is submitted for discussion with interested parties;
- formation of a complete set of documents on the EP for consideration and approval at a meeting of the Academic Council of the University.

The concept of equality on gender, national, religious, social grounds is reflected in the Internal Regulations of students, the Rules of internal labor regulations.

External stakeholders, including representatives of the IT industry (Expovision LLC, etc.) are involved in assessing the quality of educational activities and participating in the organization of the socio-educational environment.

The structural content of the modular EP 09.03.02 "Information systems and technologies", the quality of the internal content, the sufficiency of the acquired professional competencies of graduates and learning outcomes are agreed with representatives from employers who are external reviewers of the EP - representatives from employers participate in the procedure of conducting the examination of the EP. The procedure and selection of reviewers is carried out in accordance with the "Regulations on the procedure for reviewing the educational program of higher education - bachelor's degree programs, specialty programs, master's degree programs" (approved by the Rector 01.09.2020, Protocol No. 1). External reviews were presented to the experts of the EEC.

At the same time, there is a lack of purposeful actions in expanding the geography of the selection of external reviewers. All submitted reviews were received from representatives of the authorities and professional communities of the Chechen Republic (RF). But, for the positive positioning in the international space of both the competent teaching staff and graduates of the EP 09.03.02 "Information systems and Technologies". It is desirable for the management of the EP to have an independent opinion of foreign representatives related to the profile of the activity of the accredited EP, according to the results of training laid down in the MEP and the professional competencies of students. To do this, the management of the EP needs to expand the boundaries of partnership in the field of international cooperation according to the profile of the accredited EP, in order to obtain independent examinations and reviews of the modular educational program.

<u>In addition, it should be noted</u> that all the reviews submitted on 09.03.02 "Information systems and Technologies" have the same structure, do not reflect individuality, there are no recommendations from interested parties in the content of the examinations.

The algorithm for the development and approval of the EP is clearly worked out with an indication of all procedures. Both teaching staff and employers participate in the development and approval of the EP. When developing modular educational programs, the management of the EP, necessarily takes into account all professional standards for the profile of the accredited EP, and professional standards are developed, in turn, directly by the future potential employers of graduates 09.03.02 "Information systems and Technologies". Accordingly, there is a direct correlation between the participation of professional communities in the formation of an accredited EP. <u>However, the EEC experts did not see</u> documentary evidence of the participation of students

and graduates in the development and revision of the accredited EP. The participation of students in the formation of the EP is confirmed only by the procedure for choosing elective disciplines, which is carried out in the form of filling out applications for students to enroll in the study of elective disciplines.

Informing about changes in the EP is carried out at meetings of the department, educational and methodological councils, the Academic Council of the university. Also, according to the self-report, interested persons are informed about upcoming meetings on the consideration of educational programs by means of communication (mobile communication /email / social networks /messengers). The department has an account on the social network Instagram, as well as the help of the Internet platforms WhatsApp, ZOOM, through which they inform all interested parties about any changes in the EP.

<u>However, the EEC Commission notes</u> the absence of a mechanism for informing all interested parties about any planned or taken actions regarding the EP on the university's website, the university does not publish information about the changes made to the EP.

Recommendations for EP 09.03.02 "Information systems and technologies":

- The management of the EP 09.03.02 "Information Systems and Technologies" is recommended, in addition to national experts, to involve representatives from international experts, foreign educational organizations, foreign professional communities, etc. in reviewing and conducting external examinations of the MEP.
- The management of the EP 09.03.02 "Information Systems and Technologies" is annually recommended to conduct external examinations of the MEP with specific proposals in the documents, as well as to involve representatives from students and graduates in the development and revision of the EP 09.03.02 "Information Systems and Technologies", with the reflection of the issues under consideration in the minutes of the meeting of collegial management bodies.
- It is important for the management of the EP 09.03.02 "Information Systems and Technologies" to disseminate materials in various media about any planned or taken actions related to the implementation of the eP, including the results of the revision and amendments to the MOS.
- To the management of the EP 09.03.02 "Information Systems and Technologies", to expand the involvement of members of the Alumni Association in conducting external examinations of the EP, cooperation in organizing practices, scientific and industrial research with the reflection of the issues under consideration in the minutes of the meeting of collegial management bodies.

The conclusion of the EEC according to the criterion of the standard "Development and approval of the program" for EP 09.03.02 "Information systems and technologies" is a satisfactory position.

6.3 ESG. Part 1. The Standard "STUDENT-CENTERED LEARNING AND ASSESSMENT OF ACADEMIC PERFORMANCE"

The educational organization should ensure the implementation of the program in such a way as to encourage students to play an active role in the joint construction of the educational process, and that the assessment of students reflects this approach.

The evidentiary part:

The university provides the following types of awarding scholarships to students:

- Scholarship of the President of the Russian Federation;
- scholarship of the Government of the Russian Federation;
- special state scholarship of the Government of the Russian Federation;
- state academic scholarship;
- increased state academic scholarship;
- scholarship named after Academician M.D. Millionshchikov;
- scholarship of the Academic Council of GSOTU;
- state social scholarship;
- personal scholarships;
- increased state scholarship for graduate students;
- state scholarship for graduate students.
 - In addition, Regulations on various types of student support have been developed:
- Regulations on scholarship provision and other forms of material support for students and other categories of students studying at the FSBEI HE "GSOTU named after M.D. Millionshchikov;
- Regulations on the procedure for the provision and payment of one-time financial assistance to students in the FSBEI HE "GSOTU named after M.D. Millionshchikov;
- Regulations on scholarship provision and other forms of material support for students and other categories of students studying at the FSBEI HE "GSOTU named after M.D. Millionshchikov.
- All provisions are publicly available on the university's website (https://gstou.ru/sveden/grants/), information is also brought through curatorial hours, information stands, social networks, etc. An interview with students on 27.10.2021 confirmed the awareness of students about the benefits, scholarships and various measures of encouragement, stimulation, support.
- The GSOTU ensures the objectivity of the mechanism for evaluating learning outcomes in the implementation of accredited EP, which includes procedures for conducting ongoing control, intermediate and (state) final certification and is regulated by:
- The regulation on the formation of the evaluation fund for the ongoing monitoring of academic performance and intermediate certification, approved by the Rector on 24.01.2020, Protocol No. 1.
- Regulations on the fund of evaluation funds, approved by the Acting Rector on 08.11.2018, Protocol No. 2.
- The regulation on the point-rating system for evaluating the student's educational activity, approved by the Rector on 29.10.2020, Protocol No. 4.
- Fund of evaluation funds for the state final certification, approved by the First Vice-Rector on 01.09.2020, Protocol No. 1.
- The regulation on the forms, frequency and order of the current monitoring of academic performance and intermediate certification of students, approved by the Rector on 29.10.2020, Protocol No. 4.
- The regulation on the procedure for conducting the state final attestation of higher education educational programs bachelor's degree programs, specialty programs and master's degree programs, approved by the rector on 11.06.2019, Protocol No. 11, which provides for an appeal procedure in case of violation of the final attestation procedure and (or) students' disagreement with the results of the state exam.

Ensuring equal opportunities for students at GSOTU is achieved by the completeness of educational, methodological, organizational, methodological and informational support of the educational process. At the university, there are conditions for the organization of education and upbringing of students with disabilities and the disabled, namely, the availability of special technical means of collective and individual use of training:

- for persons with visual impairments: an audience equipped with video magnifiers, an audience equipped with speech synthesizer programs;
- for people with hearing impairments: an auditorium equipped with sound-amplifying equipment, an auditorium equipped with multimedia facilities for students with hearing impairments;
- for persons with disorders of the musculoskeletal system: an audience equipped with alternative information input devices;
- The "Regulations on the organization of training of disabled people and students with disabilities", "Methodological recommendations for the development of adapted educational programs of higher education for people with disabilities and disabled people, and their implementation" have been developed (approved by the Rector on 10/20/2020).

In the electronic information and educational environment (EIOS) UComplex University has the opportunity to maintain a student's portfolio, which reflects the main achievements of students in academic and extracurricular activities. A demonstration at an interview with the management of the students' personal accounts confirmed the availability of uploaded materials for assessing the current, milestone and final academic performance of students, timely and full occupancy, the availability of work programs and evaluation funds.

Students have the right to choose the place of practical training, including pre-graduate, and can also offer the topic of their scientific research, final qualifying work, choose a supervisor. Students have access to modern professional databases, information reference and search engines available on the Internet in accordance with the bachelor's degree program.

In order to attract students to scientific activities, to participate in scientific research, the University provides incentives for students in the form of various types of scholarships listed above, the accrual of which depends, among other things, on the research activities of students.

The description of the mechanism of participation of students in research is prescribed in the documented procedure "Regulations on student research" (approved by the Acting Rector on 11.06.2019, Protocol No. 11). The organization of research and development in extracurricular time is provided by: Vice-rector for Research and Innovation, head of the Department for Research and Innovation, directors of institutes and heads of departments. To do this, a ready-made plan of scientific and informational events is being formed, reports of research and development are being prepared.

To adapt and develop cohesion, the IT PRO project session for first-year students "How to become a mentor of a project: from idea to implementation" is held every year at the Department of Information Technology, in which up to 80% of all students enrolled in the 1st year participate (https://www.instagram.com/p/CGaO3AUJ8GE/?utm_source=ig_web_copy_link).

To ensure the RSW of EP 09.03.02 "Information systems and technologies" it is provided:

- the student scientific club "Programmer" has been functioning at the department since 2009, a student design club was opened in 2011 for students who are passionate about creative activity, the results of the work of these clubs are annual competitions of programmers, the winners of these competitions (Tsechoeva Amina, Albukaev Arsen, Khasukhadzhieva Louise, Namaeva Diana, Yasulova Medina, Jabrailova Seda, Magomadova Aisha, Umarova Leila others) were awarded honorary diplomas and certificates, as well as valuable prizes.

- posting information about scientific competitions and grants on the university's website (https://gstou.ru/science/grant_and_konkurs.php);
- information about ongoing conferences, forums and festivals (https://gstou.ru/science/conference.php), the possibility of trips to conferences, seminars, etc. at the expense of extra-budgetary funds of the university;
- The program "Researchers-2035" ("Researcher 20.35") as a scientific project aimed at more active involvement of scientific and pedagogical workers, as well as students.
 - information about scholarships for scientific activities,
- the possibility of publishing scientific papers in university journals: "Bulletin of GSOTU. Technical Sciences", "Bulletin of GSOTU. Humanities and socio-economic Sciences", "Grozny Natural Science Bulletin", "Bulletin of the Academy of Sciences of the Chechen Republic" at the expense of extra-budgetary funds of the university.

RSW results for the period 2017-2021.:

Table 2. The results of the publication activity of students of EP 09.03.02 "Information systems and technologies" for the period 2019-2021.

Year	International conferences	All-Russian conferences
2019	0	1
2020	0	0
2021	6	11
Total:	6	12

During the implementation of the national federal project "Personnel for the Digital Economy of the Russian Federation" of the national project "Digital Economy of the Russian Federation", the department attracted more than 20 3rd and 4th year students to work.

EEC experts note that the university pays attention to conducting a sufficient number of hours of practical and laboratory classes in the innovation center "Highpark", which is equipped with a fairly modern and necessary list of laboratory equipment. Also, the acquisition of professional skills directly at the enterprises of the IT industry is expected in the summer during the passage of professional practices.

Analytical part:

The presence of elective and elective disciplines in the EP provides the student with the opportunity to form an individual learning trajectory, which is confirmed by an interview with students held on October 27, 2021, and the following regulatory documents:

- Regulations on the organization of classes in optional disciplines, approved by the Acting Rector on May 16, 2019, Protocol No. 10.
- The regulation on training according to an individual curriculum, including accelerated training at GSOTU, was approved by the rector on 29.10.2020, Protocol No. 4.

The procedure for choosing disciplines is carried out in accordance with the Regulations on the implementation of disciplines for the choice of students in educational programs of higher education (approved by the rector on 16.05.2019, Protocol No. 10). At the same time, the catalog of elective disciplines of the EP (approved 03.09.2021 cloud IST 09.03.02) shows the limitations of the list and requires detailed discussion at the IT department together with stakeholders. Information about educational trajectories is also missing in the description of the EP on the IPIT website (http://ipit.gstou.ru/09-03-02).

When attending classes on 09.03.02 "Information systems and technologies", experts noted a variety of styles of presentation of lecture material (from exemplary to average). At the same time, the experts of the EEC note the good potential of the teaching staff of the IT department (a combination of experience and teaching experience, youth and innovation), the necessary technological conditions (partner enterprises are representatives of the IT sector in the profile of training), the availability of scientific topics and participation in grant programs, so that the teaching staff of the department more productively used their accumulated experience and knowledge, the results of scientific projects in the development of their own, individual teaching methods, which can be further broadcast to external stakeholders and applicants.

Recommendations for EP 09.03.02 ''Information systems and technologies'':

- To form more flexible individual trajectories of students, the educational and methodological management of the university, together with the management of the EP, to analyze the content of the EP 09.03.02 "Information systems and technologies" to consider the possibility of increasing the number of elective disciplines in the MEP, with the reflection of the results of the analysis in the minutes of the meeting of collegial management bodies.
- The management of the EP 09.03.02 "Information Systems and Technologies" is recommended to annually monitor the applied teaching methods of specialized disciplines in order to improve the quality of teaching, consider and implement proposals for the introduction of new teaching methods, with information reflected in the minutes of department meetings, as well as broadcast the results of their own research, implemented in the educational process, on the university's web resource.

The conclusion of the EEC according to the criterion of the standard "Student-centered learning and assessment of academic performance" for the EP 09.03.02 "Information systems and Technologies" is a satisfactory position.

6.4. ESG. Part 1. The Standard ''ADMISSION, ACADEMIC PERFORMANCE, RECOGNITION AND CERTIFICATION OF STUDENTS''

The educational organization must have pre-defined, published and consistently applied rules governing all periods of the student "life cycle", i.e. admission, academic performance, recognition and certification.

The evidentiary part:

The procedure for admission to the EP is regulated by the order of the Ministry of Education and Science of the Russian Federation dated 06/15/2020 No. 726 "On approval of the Procedure for admission to higher education educational programs - bachelor's degree programs, specialty programs, master's degree programs". Admission rules (including enrollment procedures) to the University are established independently in the part not regulated by the legislation on education and published on the official website (Admission rules to the Grozny State Oil Technical University named after Academician M.D. Millionshchikov for training in educational programs of higher education - bachelor's degree programs, specialty programs, master's degree programs for the 2021/22 academic year, approved by the Rector on 28.10.2020, Protocol No. 3, as amended on 20.02.2021, Protocol No. 7, 27.05.2021, Protocol No. 10). In its activities on the formation of a contingent of students, the admission committee of GSOTU is guided by the legislation of the Russian Federation and the RAC "Regulations on the Admission Committee" (approved by the Rector on 02/18/2021, Protocol No. 1).

The website of the University Admissions Committee contains information for applicants in accordance with the Rules of Admission to the University (<u>Admission Campaign 2021 (gstou.ru</u>)).

The Rules and Regulations are published on the University's website (https://gstou.ru/sveden/files/Pologhenie_o_priemnoy_komissii.pdf, https://gstou.ru/sveden/files/a) pravila priema v gntu 2021(1).pdf).

The formed contingent of students of EP 09.03.02 "Information systems and Technologies" 2017-2021 academic year (2016-2017 academic year - 105/0, 2017-2018 academic year - 65/13, 2018-2019 academic year - 60/41, 2019-2020 academic year - 59/113, 2020-2021 academic year - 107/165, 2021-2022 academic year - 180/200 students) shows in general the maintenance of an average sustained enrollment of students without reducing the number of students by 2021 admission.

In general, according to the accredited educational program, 6 graduates took place – 101 students.

In accordance with part 1 of Article 107 273-FL "On Education in the Russian Federation", holders of a foreign education recognized in the Russian Federation are granted the same academic rights as holders of the corresponding education received in the Russian Federation. If the applicant's education does not fall under the international agreement on mutual recognition, then the documents for recognition are sent by them independently to the Glavexpertcenter (Moscow). In accordance with the current legislation, the University does not cooperate with national centers or other educational organizations on the issues of nostrification of educational documents. Foreign citizens and stateless persons have the right to receive higher education at the expense of budgetary allocations in accordance with international treaties of the Russian Federation, federal laws or the quota established by the Government of the Russian Federation for the education of foreign citizens and stateless persons (hereinafter referred to as the quota for the education of foreign citizens), as well as at the expense of individuals and legal entities in accordance with agreements on the provision of paid educational services. During the reporting period, 2 foreign students studied (EP 09.03.02 "Information systems and technologies") (Kazakhstan, Uzbekistan).

The mechanism for recognizing the results of students, including those mastered during academic mobility, as well as the results of additional, formal and non-formal training is normatively fixed in:

- Regulations on the offset of the results of mastering, open online courses and the offset of the results of mastering academic subjects, courses, disciplines (modules) of practices, additional educational programs in other organizations engaged in educational activities (approved by the Rector on 29.10.2020, Protocol No. 4).
- Regulations on the procedure for organizing and implementing educational activities for additional professional programs, including the organization of training for the disabled and persons with disabilities (approved by the Rector on 12/24/2020, Protocol No. 5).
- Regulations on the organization of the use of e-learning, distance learning technologies in the implementation of educational programs, including the implementation of educational programs using exclusively e-learning, distance learning technologies (approved by the Acting Rector on 29.01.2019, Protocol No. 5).
- Regulation on the network form of implementation of educational programs (approved by the Rector on 29.10.2020, Protocol No. 4).

Students of EP 09.03.02 "Information Systems and Technologies" have the opportunity to take additional courses of the Huawei ICT Academy in the following areas: artificial intelligence, big data, network security, routing and switching, wireless networks (WNPC) and professional certification.

Students undergo an internal assessment of the quality of training, which is regulated by:

- Regulations on the intra-university system of monitoring the quality of education, approved by the Rector on 09/24/2020.
- The Regulation on the internal independent assessment of the quality of education, approved by the First Vice-Rector of GSOTU on 26.06.2021.

The assessment of the quality of training is carried out in the form of entrance control of knowledge, intermediate certification in all disciplines and on the basis of the results of practical training, final state certification (representatives of stakeholders are included in the certification commissions), which allows updating the content of the EP, as well as carrying out a continuous assessment of the process of competence formation.

Graduates of the University receive state-issued diplomas. Samples of educational documents were approved by the Order of the Ministry of Science and Higher Education of the Russian Federation No. 1100 dated 01.10.2013 "On approval of samples and descriptions of documents on higher education and qualifications and appendices thereto".

The Personnel Department accompanies the process of transfer and restoration of students, regulated by the Regulation on the procedure for transfer, expulsion and restoration of students, approved by the Rector on 29.10.2020. The number of vacant places for admission (transfer) is posted on the University's website: https://gstou.ru/sveden/vacant/.

All students enrolled in the OP 09.03.02 "Information Systems and Technologies" are provided with practice places, which is confirmed by contracts concluded with specialized organizations, and interviews with employers and students conducted on October 27, 2021 (contracts No. 0421-015 with GBU "Medical Information and Analytical Center" dated 12.04.2021, No. 0121-001 with the Ministry of Transport and Communications of the Chechen Republic dated 29.06.2021, No. 0421-007 with EXPOVISION LLC dated 12.04.2021), as well as interviews with students 27.10.2021

The University constantly monitors the employment of graduates. The number of graduates of EP 09.03.02 "Information Systems and Technologies" provided with jobs in 2020 averaged 71% (full-time/part-time, according to monitoring conducted by the University).

Procedures for assessing the level of knowledge, the formation of students' competencies are available electronically in the intra-university electronic information and educational environment (http://edu.gstou.ru/).

Analytical part:

The university has a Department of International Projects and scientific and Technical information, which is engaged in the development of cooperation between GSOTU and foreign educational and scientific centers, the implementation of joint programs, support for international mobility of teachers, students and university staff working in the field of international activities. Students of GSOTU have the opportunity to study at universities in the region, as well as at universities near and far abroad within the framework of the academic mobility program. For this purpose, the university has a "Regulation on the offset of the results of mastering open online courses and the offset of the results of mastering academic subjects, courses, disciplines (modules) practices, additional educational programs in other organizations engaged in educational activities" (approved by the Rector on 29.10.2020, Protocol No. 4). However, at the time of the international accreditation, there was a lack of results on the implementation of the program "academic mobility of students", although graduates of the EP 09.03.02 "Information systems and Technologies" said that the presence of foreign experience in studying special programs would allow them to be more competitive in the labor market.

Recommendations for EP 09.03.02 "Information systems and technologies":

• The management of the EP is recommended to determine indicative indicators in the planning documents and plan for the next 5 years activities to implement the item: "Participation of students in the program "incoming and outgoing / external and internal academic mobility", including in an online format, as well as to develop measures to promote mobility among students of the EP.

The conclusion of the EEC according to the criterion of the standard "Admission, academic performance, recognition and certification of students" for the EP 09.03.02 "Information systems and technologies" is a satisfactory position

6.5. ESG. Part 1. Standard "TEACHING STAFF"

The organization of education should have objective and transparent processes of recruitment, professional growth and development of all personnel, which allow them to ensure the competence of their teachers.

The evidentiary part:

The personnel policy of the University is reflected in a number of local regulations: the Strategic Development Program of the M.D. Millionshchikov State Technical University until 2030, approved by the rector on 02.09.2021, the Collective Agreement of the Academician M.D. Millionshchikov State Technical University for 2018-2021, approved by the Acting Rector and the Chairman of the trade Union Organization on 28.09.2018, the Regulation on Effective Contract, the Regulation on the procedure for holding a competition for the positions of researchers in the Grozny State Petroleum Technical University named after Academician M.D. Millionshchikov"; Regulations on the procedure for filling positions of teaching staff related to the teaching staff; Rules of internal labor regulations. All documents are posted on the University's website.

The procedure for planning and calculating the working time of scientific and pedagogical staff of the University, including the harmonic ratio of educational (all types of contact work: classes of lecture and seminar types, intermediate certification, consultations, etc.), scientific, creative, educational, organizational, educational work is determined by the Procedure for planning the working time of scientific and pedagogical workers.

The qualification requirements for the positions of scientific and pedagogical staff of the University are harmonized with the requirements of the Unified Qualification Directory of positions of managers, specialists and employees (section "Qualification characteristics of positions of managers and specialists of higher professional and additional professional education"), approved by Order of the Ministry of Health and Social Development of the Russian Federation dated January 11, 2011 No. 1n.

EP 09.03.02 "Information systems and technologies" is provided by qualified teaching staff. Teachers have an education and/or additional professional education corresponding to the academic disciplines taught; also, all teachers regularly undergo advanced training in accordance with the requirements.

In total, the teaching staff implementing the EP 09.03.02 "Information systems and technologies" – **48 people**, 55.57% settling down.

The total number of teachers of the department on 01.10.2021 is 24 (full-time - 16) people, including: 2 - candidates of Sciences, including 3 teaching staff are representatives of the industry (Iskandar Maratovich Azhmukhamedov, Dean of the Faculty of Digital Technologies and

Cybersecurity, Professor of the Department of Information Security and Digital Technologies, Doctor of Technical Sciences, Professor, Astrakhan State University, Taus Andievna Khamidova, Head of the Department of Mathematical Analysis, Algebra and Geometry, Candidate of Physical and Mathematical Sciences, Associate Professor, Chechen State University, Adam Rizvanovich Yunusov, Senior Business concultant of the Sheikh Zayed Foundation for the Support of Entrepreneurship and Innovation.).

Some of the young employees are studying (2) or have completed (4) postgraduate studies, preparing for the defense of PhD theses. In 2019, the senior lecturer of the department, D.A. Machueva, defended her dissertation for the degree of Candidate of Technical Sciences at ASTU in the scientific specialty 05.13.10 "Management in social and economic systems" on the topic "Models and methods of information management of social systems based on a multi-agent approach" (Dissertation Council D307.001.10).

Scientific projects are regularly carried out at the department with the involvement of University teachers in the work. During the reporting period, the staff of the department made 214 publications, including (Scopus - 6, Web of Science - 8).

The main directions of scientific activity of the department are:

- formation of information competence of scientific and pedagogical personnel of a technical university in the conditions of an information and educational environment,
- multimedia technologies in education,
- information security of social systems,
- theoretical foundations of the development of an integrated information environment at the enterprise.

Employees of the IT Department take part in scientific research. In 2019, IAIT won a grant for the development and dissemination of the best experience in the field of digital skills formation within the framework of the federal project "Personnel for the Digital Economy" of the national "Digital Economy" program of the state program of the Russian Federation "Education Development" (Agreement No. 073-15-2019-20174 of 22.11.2019) in the amount of 5000000 rubles, and a grant for the training of scientific and pedagogical workers and employees of employers' organizations for the implementation of modern continuing education programs (agreement No. 075-15-2019-1735 dated 11/20/2019) in the amount of 17,000,000 rubles. In 2020, IAIT received a grant in the form of a subsidy from the federal budget for the project "Training of scientific and pedagogical workers and employees of employers' organizations to implement modern continuing education programs" of the federal project "New Opportunities for everyone" of the national project "Education" in the amount of 20,000 000 rubles. This is important, but in order to form their own competencies in the profile of the EP, research projects and contractual work in the IT field are necessary.

<u>The disadvantages</u> include the lack of experience of some young teachers in conducting lectures (the ability to interest and attract the attention of students, to prepare the structure and interconnectedness of the lecture elements). IT is desirable for the IT Department to approve forms of mentoring in the field of pedagogical skills, as well as to increase the number of employees with a candidate's and doctor's degree (possibly by redistributing within the IAIT).

<u>Advanced training</u> of teaching staff takes place every 3 years at GSOTU and specialized institutes of the Russian Federation and have international certificates. During the period from 2019 to 2021, 22 teachers of the department passed advanced training, including 3 programs in the field of teaching methods and ICT in the profile of EP 09.03.02 "Information systems and technologies".

Since 2019, an "Effective contract" has been introduced for the teaching staff, which takes into account all the achievements of the teacher for the previous reporting period: academic and scientific work, publications, professional development, etc.

The conclusions of the EEC on this standard were confirmed in reports and dialogues held at meetings with the administration and employees of GSOTU departments:

- 1. Interview with the rector of GSOTU dated 10/26/2021;
- 2. Meeting with the vice-rectors of GSOTU dated 10/26/2021;
- 3. Meeting with the heads of structural divisions of GSOTU dated 10/26/2021.;
- 4. Interviews with directors of institutes from GSOTU dated 26.10.2021;
- 5. Interviews with heads of departments and teaching staff from GSOTU dated 26.10.2021.

Analytical part:

The teaching staff is the main resource for ensuring the mission of the university. GSOTU manages the personnel potential of the teaching staff in accordance with its development strategy and taking into account the specifics of accredited EP.

The EP is provided with qualified teaching staff. Teachers have an education and/or additional professional education corresponding to the academic disciplines taught and regularly undergo advanced training in accordance with the requirements of the Ministry of Science and Higher Education of the Russian Federation.

The analysis of the publication activity of the teaching staff of the IT department shows fairly stable indicators, including in rating publications, but at the same time there is <u>a weak activity</u> in publishing UML, including in English, although the availability of own developments and grants, a sufficiently equipped material and technical base, high competence of the teaching staff of IAIT allows the management of the EP to confidently plan the provision of the educational process for the EP 09.03.02 "Information systems and Technologies".

An interview with the University Management showed a fairly clear strategy of the university in the field of development of internalization and international cooperation with universities of the near and far abroad, to ensure recognition of the university's status in the international field.

<u>In this regard</u>, the EEC experts note the good potential of teaching staff to participate in international programs, for example in Erasmus +, Jean Monnet - Erasmus +, Marie Skłodowska-Curie, off-line and on-line academic mobility, etc. To do this, the management of the EP needs to expand the geography of cooperation with partner universities, going beyond the borders of the Russian Federation, by harmonizing modules with the MEP of foreign universities corresponding to the profile of the EP 09.03.02 "Information systems and Technologies".

Recommendations for OP 09.03.02 "Information systems and technologies":

- The management of the EP 09.03.02 "Information Systems and Technologies" is recommended to determine indicative indicators in the planning documents and plan for the next 5 years activities to implement the item: "publication of the UML, including in English", and begin implementation from the 2022-2023 academic year.
- The management of the EP 09.03.02 "Information Systems and Technologies" to organize advanced training in the field of teaching methods (didactics) and rhetoric for young teachers, including the appointment of experienced mentors from IAIT teaching staff, trial and open lectures, methodological seminars, etc.
- The management of 09.03.02 "Information Systems and Technologies" is recommended to develop an action plan aimed at developing professional cooperation with foreign

educational organizations in the profile "Information systems and Technologies", to determine indicative indicators in planning documents and plan for the next 5 years activities to implement the item: "Participation of teaching staff in programs: external and internal / outgoing and incoming academic mobility, participation in international grant programs", including in online format, and to begin implementation from the 2022-2023 academic year.

The conclusion of the EEC according to the criterion of the standard "Teaching staff" for 09.03.02 "Information systems and technologies" is a satisfactory position.

6.6. ESG. Part 1. Standard "EDUCATIONAL RESOURCES AND STUDENT SUPPORT SYSTEMS"

The organization of education should ensure that sufficient, accessible and appropriate educational resources and student support services are available.

The evidentiary part:

The infrastructure of educational resources that ensures the implementation of the EP 09.03.02 "Information Systems and Technologies" complies with the Federal State Educational Standard and federal legislation, is determined by the Federal Law "On Education in the Russian Federation" dated 29.12.2012 No. 273-FL (ed. dated 26.07.2019) and is sufficient to achieve the goals of the EP.

To carry out educational activities at the University, the necessary property complex has been created and operates, which includes lecture halls, auditoriums, reading rooms, an educational part, departments, departments, gyms, catering facilities, a medical office, etc.

The material and technical base of the University consists of buildings equipped with scientific and educational laboratories, computer classes and specialized classrooms, as well as corresponding to the federal state standard in the field of training.

The total area of buildings (premises) of the University is 71266.0 sq.m., including:

- 1. The area of educational and laboratory premises is 55810.0 sq.m, including:
- area classrooms 29447,0 sqm of it area indoor sports facilities 3921,0 sq. m.;
- area intended for research units 1214,0 sq. m.;

square outbuildings – 12663,0 sqm of it area catering – 1206,0 sq. m.;

- educational support area 12486,0 sq. m.
- 2. Square of dormitories 8623,0 sq. m.
- 3. Square of other buildings 6833,0 sq. m.

Of the total area of the University intended for the implementation of the set goals and solving tasks of both educational and scientific, socio-cultural, sports and recreational nature, the total area of the ISAID is 6177.7 sq.m., including:

- the area of educational premises 3563.2 sq.m.;
- the area of educational and auxiliary premises 1878.1 sq.m.;
- the area of auxiliary premises 736.4 sq.m.

The innovation cluster of the University consists of two structural divisions - Technopark and Highpark.

Technopark is a subject of scientific and innovative infrastructure that creates conditions favorable for the development of production in the scientific and technical sphere. The technopark is equipped with industrial, laboratory and experimental equipment and is a center for the formation and training of qualified high-tech personnel, combines an innovation and technology

center, a technology transfer center, an education quality management center, an innovative scientific and educational center and 9 small innovative enterprises.

The highpark was opened in February 2019 and was created to support innovative entrepreneurship by forming a material, technical, socio-cultural, service, financial and other base. The main task of the division is to support and prepare small and medium-sized innovative enterprises for independent activity, commercial development of scientific knowledge, inventions, know-how and high-tech technologies and transfer them to the market of scientific and technical products in order to meet the needs for these products in the region.

The university has developed a network of information and communication equipment (Table 8).

Table 8 - Availability of information and communication equipment of GSOTU

Name of indicators	Total
Personal computers - total by university	1297
A laptop	87
Monoblock	43
Multimedia projectors	144
Interactive whiteboards	34
Printers	120
Multifunctional devices	171

The University buildings have a high-speed Internet connection based on a fiber-optic communication system. All administrative divisions and educational laboratories are connected to the Internet. Fiber-optic communication channels between buildings enable fast and uninterrupted access to all resources at speeds up to 1 Gbit/s. The maximum speed of fixed (wired and wireless) Internet access is 150 megabits/s.

The number of computer places in the university library for users is 30. All computers have Internet access. The library has local access to its own electronic documents, which include 9 databases of educational, methodical, reference literature and periodicals. The Library provides each student of the University with individual unlimited access from any point where there is access to the Internet to the educational materials of the electronic library system (hereinafter referred to as the ELS). All information on available electronic library systems and access conditions can be obtained in the section "Electronic Library Systems" on the library's website. Educational literature, which is part of electronic library systems, provides most of the disciplines implemented by the main educational programs.

According to the order of the Ministry of Education and Science of the Russian Federation No. 545 dated 02.04.2020 "On measures for the implementation by organizations subordinate to the Ministry of Science and Higher Education of the Russian Federation of the Decree of the President of the Russian Federation dated April 2, 2020 No. 239 "On measures to ensure the sanitary and epidemiological welfare of the population in the territory of the Russian Federation in connection with the spread of a new coronavirus infection (COVID-19)", all University students from 06.04.2020 were transferred to training using e-learning and distance educational technologies. The training sessions were conducted in accordance with the training load and the schedule of training sessions in the web conferencing mode in the systems: Cisco Webex, ZOOM and Skype. Daily inspections of the course of classes were carried out by the vice-rector for Academic Affairs, directors of institutes, the director of the DEMW and employees of the departments of the DEMW by visiting web conferences of teachers. In the same format, a summer test and examination session

of full-time students was held, as well as training sessions and a test and examination session of full-time and part-time students.

The following local regulations have been developed for the organization and implementation of educational activities of the University with the use of e-learning and distance learning technologies:

- temporary regulation on the point-rating system for evaluating student's educational activities in the context of preventive measures related to the threat of coronavirus infection;
- regulations for the state final certification at the University in the 2019-2020 academic year with the use of DOT.

In October 2019, the Boiling Point of GSOTU was opened - a project of the national technological initiative, which opens on the basis of universities, to involve students in project work, for which more than 60 events were held, most of which are educational. In March 2020, the Project "Elite Education of GSOTU" was launched as a "pilot" based on the Boiling Point of GSOTU. The first stage of the project - testing of students selected by the directors of the institutes, on the level of knowledge of the English language, has been completed. Based on the results of testing, groups were formed that were supposed to begin in-depth study of English in March 2020, but due to the introduction of restrictive measures due to coronavirus infection, classes began only in October 2020, which led to a significant shift in the terms and training program. In the future, students of this project will have two stages: - in-depth training in the field of technological entrepreneurship; - in-depth study of specialized disciplines in the field of the direction chosen by the student. Thus, at the exit, subject to successful completion of control measures, together with a diploma of higher education, the student receives a diploma of additional education, the main advantage of which will be the competitiveness of the graduate in the labor market,

As part of the implementation of the directions of educational and social work, a large number of events of the all-Russian, university, faculty and cathedral level were held at the University, a large number of youth projects were implemented, including: festivals, sports contests, intellectual competitions, events dedicated to public holidays and memorable dates; events within the popularization of science, culture and sports; meetings with representatives of law enforcement agencies, medical institutions, the department of spiritual and moral education; with representatives of legislative and executive authorities, science, culture and sports, etc. Active participation of students in various subotniks was organized. University students took an active part in almost all socio-political and cultural events held in the republic. They took active part and became winners and prize-winners of a number of youth republican and regional projects in the field of science, culture and sports.

The University implements measures of social support for students. First of all, this applies to low-income students, orphans and semi-orphans, disabled people. Social support of employees and students was of particular relevance during the period of self-isolation. Students in need received additional financial assistance in the form of food packages. Students living in the hostel were exempted from the payment for accommodation in the hostel for the period of self-isolation, including those students who did not leave the hostel. Teachers and staff who fell ill with coronavirus infection received financial support for rehabilitation in the amount of 50 thousand rubles. from the University Staff and Faculty Union. Also, one-time financial assistance is provided to students in need. Every year, on the basis of contracts concluded with medical institutions of Grozny, medical examination and medical examination of students, faculty and staff of the University is carried out.

Appropriate conditions are created for students with disabilities to ensure the availability of education at the University. An "inclusive environment" is being created - ramps, access to library

resources, the University's website has a version for the visually impaired, when concluding contracts with electronic library systems, services are included to provide students with audiobooks and textbooks, versions for the disabled.

The premises for independent work of students in the IT direction are equipped with educational furniture, computer furniture, interactive whiteboards, projectors, computer equipment with the ability to connect to the Internet and provide access to the electronic information and educational environment of the University (confirmed by a Certificate on the material and technical support of the educational program of higher education of the bachelor's degree program (09.03.02 "Information systems and Technologies", Information on the availability of equipped classrooms, facilities for practical training https://gstou.ru/sveden/objects/cabinets/09.03.02-informacionnyetehnologii-v-obrazovanii_op0014.html).

The University meets all the requirements of fire safety and sanitary and epidemiological standards imposed on educational organizations. There is a sanitary and epidemiological conclusion No. 20.ChR.88.000m.000220.06.19 dated 25.06.2019 and a conclusion on the compliance of the object of protection with mandatory fire safety requirements dated 01.10.2020. Each educational program includes a mandatory discipline "Life safety".

Since the summer of 2017, the sports and recreation camp "Burevestnik" has been operating, located on the Black Sea coast in the village of Agoi of the Tuapse district of the Krasnodar Territory, which allows providing staff and employees with affordable rest during summer vacations. The cost of vouchers was compensated by financial assistance allocated by order of the rector.

In the 2019-2020 academic year, participation in the program for receiving social benefits for the purchase of residential premises was organized as part of the implementation of measures to provide housing for young scientists of the main event "Providing housing for certain categories of citizens" of the state program of the Russian Federation "Providing affordable and comfortable housing and utilities for citizens of the Russian Federation". In accordance with the regulations established by the Order of the Ministry of Education and Science of the Russian Federation dated 03.12.2018 No. 69-n "On certain issues of providing social benefits to young scientists of organizations subordinate to the Ministry of Science and Higher Education of the Russian Federation for the purchase of residential premises", lists of young scientists were prepared with the documents necessary to participate in the events and sent to the Ministry of Education and Science of the Russian Federation.

Regular analysis of the sufficiency and modernity of classrooms, educational laboratories, computer equipment, software, financial resources available to EP 09.03.02 "Information Systems and Technologies" is carried out annually twice a year by the relevant services and the management of the University.

At the end of the academic year, responsible departments, departments, laboratories make up a list of equipment necessary for the purchase, repair, renovation, etc., etc. material support, these expenses form a plan of financial and economic activities for each responsibility center, which includes the entire register of upcoming purchases, expenses, etc. In addition, the annual work plan of the department and the work plan of the Institute reflect all the material resources of the departments with comments on the need for their replacement, renewal or repair. The annual inventory of property allows you to analyze and predict the needs of training units.

Regular questioning of students and teachers about their satisfaction with the conditions of the educational process allows us to identify the degree of provision of the educational program with material, technical and information resources.

According to the results of the survey, 92.8% are satisfied with the level of accessibility of library resources, 95.2% of students are satisfied with the quality of services provided in libraries

and reading rooms, 97.6% of students are satisfied with the support of educational materials in the learning process, 92.8% of students are satisfied with the availability of health services, 95.3% of students are satisfied with the availability of computer classes, 97.6% of students are satisfied with the availability and quality of Internet resources.

Analytical part:

The EEC experts got acquainted with the equipment of the material and technical base for the implementation of the accredited EP 09.03.02 "Information systems and Technologies". According to the results of interviewing the management of the EP and students, the EEC noted that the management provides various means of communication and communication for teaching staff and students. It is noted that WI-FI is functioning on the territory of the university, there is access to educational Internet resources and to all educational resources on the Internet, the University Library and specialized closed library resources.

Teaching staff of the department provide students with all the necessary educational and methodological information. <u>However, it is noted</u> that professional licensed software according to the profile of EP 09.03.02 "Information systems and Technologies", similar to those used in the manufacturing industry, should be updated and updated annually to eliminate the risks of using *OpenSource* products, including modern interactive EIOS (especially during a pandemic).

Recommendations for EP 09.03.02 "Information systems and technologies":

- The University management should consider the relevance of the transition to an electronic educational information system (EOIS) with the possibility of interactive interaction between students and teachers (e-Moodle, etc.), which is especially important for the conditions of the pandemic and to minimize the risks associated with the use of e-mail.
- The management of EP 09.03.02 "Information Systems and Technologies", in order to avoid undesirable risks, gradually switch from Open Source software to modern professional licensed software used in the industry, including through the registration of partnerships with leading software manufacturers.

The conclusion of the EEC according to the criterion of the standard "Educational resources and student support systems" for 09.03.02 "Information systems and technologies" is a satisfactory position.

6.7. ESG. Part 1. INFORMATION MANAGEMENT Standard

An educational organization must ensure that it collects, analyzes and uses relevant information to effectively manage its activities and its educational programs.

The evidentiary part:

Currently, the University has an Electronic information and Educational environment of GGNTU, which includes the categories:

- 1) distance learning;
- 2) electronic library systems;
- 3) electronic portfolio;
- 4) the results of the interim certification;
- 5) educational and methodical literature;
- 6) working programs of disciplines.

The main objectives of the information and educational environment are:

- organization of access to curricula, work programs of disciplines (modules), practices, assessment funds, publications of electronic library systems and electronic educational resources specified in work programs, as well as to educational materials of disciplines in remote access mode;
- recording the progress of the educational process, current control and intermediate certification (automated system "BRS");
- conducting all types of classes, procedures for evaluating learning outcomes, the implementation of which involves the use of e-learning, distance learning technologies;
- formation of the student's electronic portfolio, including the preservation of the student's works, reviews and assessments of these works by any participants in the educational process, including employers (the University uses the information and educational portal "4 Portfolio" to form and maintain a portfolio of student achievements);
- creation of conditions for the organization of interaction between participants of the educational process, including synchronous and (or) asynchronous via the Internet.

An employee of the University has developed and implemented an automated system for creating a schedule of training sessions and intermediate certifications for students of all forms of education. The interactive schedule is posted on the University's website.

Persons with access to personal data are allowed to work with the EIOS database. The control is carried out by the employees of the DEMW, who are responsible for the formation of statistical reports on the activities of the University.

In order to implement the policy and strategy in the field of quality of training of specialists, the University provides access to all teachers, employees and students to the information resources necessary for work and training. In all academic buildings and dormitories there is access to the internal network – teaching or educational, depending on the category of the contingent, in which the working programs of disciplines and practices, the program of the state final certification, the fund of evaluation tools and methodological recommendations to students are placed.

A large amount of information about the University and institutes is distributed by the Creative Projects Support Department. The relevant structures of the University are engaged in the formation of a unified information space around the University, a positive image of the university, its positioning as a competitive educational institution with advanced scientific and innovative technologies, capable of training highly qualified specialists.

The achievements of students and teachers of the University are covered in news and announcements of the University and Institutes on the University's website, videos about various events in the life of the University and students, which are then posted on the University's website and on the University's Instagram account, on the state television of the Chechen Republic.

One of the informative indicators of the quality of training specialists at the University, their compliance with the requirements of the market economy, is the demand for graduates in the labor market and the assessment of their degree of employment. Improving the efficiency and monitoring the employment of graduates, conducting career guidance work, including the development and distribution of career guidance products – all these issues are under the jurisdiction of the Department of Practice and Employment, which is part of the Department for Educational and methodological work. The University's website contains information on the offered vacancies and information about the employment of graduates (https://gstou.ru/alumni/employment.php).

According to the results of the survey, 22.6% answered the question about assessing the involvement of teaching staff in the process of making managerial and strategic decisions "very well", 69.8% answered "well", 7.5% answered "unsatisfactory answers".

Analytical part:

The internal system for assessing the quality of education at GSOTU is aimed at ensuring the management of operational, objective and reliable information about the state and development of the educational system, the educational process and the processes accompanying and supporting it, about the compliance of intermediate and final results with target settings and regulatory requirements. It forms an inseparable integrity with the external evaluation system, as it is focused on maximizing the quality of education and searching for reserves to improve it.

At the University, the internal assessment of the quality of education is continuous, systematic and systematic, so it is more appropriate to talk about monitoring the quality of education. So, in order to monitor the progress of students, a control system is used, which includes current, intermediate and final control. The methods of current, intermediate and final control of disciplines are established in the evaluation funds.

The Commission noted that, in order to implement the policy and strategy in the field of quality of training of specialists, the University provides access to all teachers, employees and students to the information resources necessary for work and training, *however*, *the experts of the EEC note* the lack of a mechanism for *interactive* interaction between structural units, including between teaching staff and students, since the university EIOS carries the function of the system as a data repository.

Recommendations for EP 09.03.02 "Information systems and technologies"

• The university management is recommended to modernize the electronic information and educational system by the beginning of the 2022-2023 academic year, ensuring interactive interaction between all participants in the educational process, including between teaching staff and students, in all areas of the university's activities.

The conclusion of the EEC according to the criterion of the standard "Information Management" for 09.03.02 "Information systems and technologies" is a satisfactory position

6.8. ESG. Part 1. The Standard "INFORMING the PUBLIC"

The educational organization should inform the public about its activities (including programs). The information must be clear, reliable, objective, relevant and accessible.

The evidentiary part:

In order to form open and publicly accessible information resources containing information about its activities, the University provides access to data on educational programs being implemented by posting them in information and telecommunications networks, including on the official Internet site (https://gstou.ru/).

In order to make information about the activities more widely available, the official website of the University also has an English version, but not all tabs have a translation of the presented material.

In order to implement accessibility requirements for the visually impaired, the site provides special opportunities for this category of persons in accordance with the Basic Provisions of GOST R 52872- 2012.

In accordance with the Decree of the Government of the Russian Federation dated 10.07.2013 No. 582 (as amended. Resolutions of the Government of the Russian Federation dated 20.10.2015 No. 1120, dated 17.05.2017 No. 575, dated 07.08.2017 No. 944, dated 29.11.2018 No. 1439, dated

21.03.2019 No. 292) "On approval of the Rules for posting on the official website of an educational organization in the information- telecommunications network "Internet" and updates of information about the educational organization" and Rosobrnadzor Order No. 831 dated 08/14/2020 "On approval of Requirements for the structure of the official website of the educational organization in the information and telecommunications network "Internet" and the format of information presentation" on the University website (link) information about the educational organization is posted:

- basic information (name, date of creation, legal address, contact details, founder, availability of branches);
- structure and management bodies of an educational organization;
- documents (Charter, License for educational activities (with appendices), Certificate of state accreditation (with appendices), local regulations);
- education (information on educational programs implemented at the University (main professional educational programs);
- documents regulating the educational process; the number of students; information on the results of admission, transfer, recovery and expulsion; directions and results of research activities);
- educational standards according to which training is carried out at the University;
- management, pedagogical (scientific and pedagogical) staff;
- material and technical support and equipment of the educational process (information on the availability of equipped classrooms and facilities for practical classes, on the availability of libraries, on the availability of sports facilities, on the nutrition and health conditions of students, on access to information systems and information and telecommunication networks, information for the disabled and persons with disabilities, a list of electronic educational resources);
- scholarships and student support measures (information on the procedure for awarding and paying scholarships, providing financial assistance to students, local regulations, orders);
- paid educational services (information on the procedure for providing paid educational services, information on the approval of tuition fees);
- anti-corruption (documents, links);
- financial and economic activity (financial and economic activity plan, indicators);
- vacant places for admission (transfer) of students (information on the procedure for admission (transfer) and vacant places for admission (transfer));
- accessible environment (information about special conditions for teaching disabled people and persons with disabilities, including specially equipped classrooms; about facilities for practical classes adapted for use by disabled people and persons with disabilities; about library(s) adapted for use by disabled people and persons with disabilities; about sports facilities adapted for use by disabled people and persons with disabilities; about the means of education and upbringing adapted for use by disabled people and persons with disabilities; about ensuring unhindered access to the buildings of an educational organization; about special nutrition conditions; about special health protection conditions;
- international cooperation (information on agreements concluded and planned to be concluded with foreign and (or) international organizations on education and science (if available); on international accreditation of educational programs (if available));
- schedule of students for the current semester.

Informing the public about the results of its activities, plans and innovations, the University, in addition to posting information on its website, carries out during open days, joint "Job Fairs" with employers, participation in educational exhibitions, in the media, etc. Joint congresses and

symposiums, exhibitions and conferences with potential employers allow all participants of the educational process to interact systematically. These activities also make it possible to assess the satisfaction of stakeholders in the quality of the information received and in its completeness.

Information from employers on the availability of vacancies for the employment of specialists is posted on the University's website in the section "Graduates". The information is available on the University's website. There is an opportunity to send an application on-line on the vacancies page.

Graduates of the University have the opportunity to get advice on employment issues in the Department of Practice and Employment (DPT).

Together with the graduating departments, relevant work is carried out with employers. Every year, the University takes part in events organized by regional departments, such as the "Job Fair of Job Training Places", organized by the Ministry of Labor, Employment and Social Development of the Chechen Republic. At the Fair, students and graduates hold meetings and conversations on topics of interest to them directly with the heads of enterprises, including representatives of educational institutions.

To search for vacancies for University graduates and analyze employers' requirements for the qualifications of specialists, on-line services are used, such as "trudvsem.ru", "HeadHunter.ru", "Rabota.ru", "Zarplata.ru" and others.

In order to reach the population more widely with information about the University's activities, social media platforms, for example, Instagram, are used. The University's account pages provide information about educational activities, scientific achievements of students, significant events in the Chechen Republic and in the world, about the cultural, creative and sports life of the University. Thus, the University promptly publishes complete information about its activities (including educational programs), in a clear, accurate, objective, relevant and accessible form.

The survey of students conducted during the visit of the EEC IAAR showed that:

- 97.7% of students are satisfied with the usefulness of the website of educational organizations in general and faculties in particular.
- 95.2% of students are satisfied with the information about courses, educational programs, and academic degrees.

Analytical part:

Analysis of the content of the official website of GSOTU, as well as interviews with students, staff and management staff made it possible to find out that all information about GSOTU is transparent and reliable, students and staff have the opportunity to contact the management on issues requiring permission through the official portal of the University. In addition, the website contains information about the financial activities of the University, personal data of teachers, information about open days, information about conferences for students held at the university, all-Russian conferences, etc.

The university's website provides information on cooperation with scientific and consulting organizations and educational organizations implementing such educational programs. The results of the university's activities and in the context of the EP are reflected in full.

EEC experts believe that in order to strengthen the university's activities in the field of international cooperation, recognition at the world level, informing the foreign public about the implementation of the strategic development of the university, the university management needs to carry out targeted work on periodically filling the content with relevant information in English and keeping the English version of the site up to date.

A sufficiently well-developed website of the university, which allows interested persons to
get acquainted with such aspects of the university's activities as: educational, research, socioeducational, international, educational and methodological, etc., with the transition to the
location of all regulatory and methodological, legal, statistical and other databases, with the
attachment of all approved documents and appendices.

Recommendations for EP 09.03.02 "Information systems and technologies"

• The management of the EP 09.03.02 "Information Systems and Technologies" needs to keep up-to-date the English version of the institute and department pages to inform about their activities and maintain their image at the international level.

The conclusion of the EEC according to the criterion of the standard "Informing the public" for EP 09.03.02 "Information systems and technologies" is a strong position

6.9. ESG. Part 1. The Standard "CONTINUOUS MONITORING AND PERIODIC EVALUATION OF PROGRAMS"

The educational organization should monitor and periodically evaluate programs in order to ensure that they achieve their goal and meet the needs of students and society. The results of these processes should lead to continuous improvement of programs. All stakeholders should be informed of any planned or undertaken actions regarding these programs.

The evidentiary part

Every year in connection with the development of science, culture, economy, technology, technology and the social sphere, the updating of federal state educational standards, changes in the requirements of employers (based on a survey), the labor market and in accordance with:

- Regulations on the procedure for organizing and implementing educational activities for educational programs of higher education bachelor's degree programs, specialty programs, master's degree programs at Grozny State Oil Technical University named after M.D.Millionshikov, approved by the Rector on December 27, 2018, Protocol No. 3;
- Regulation on the procedure for the development and approval of educational programs of higher education, approved by the Acting Rector on 10.01.2019, Protocol No. 4;
- The Regulation on the procedure for the development and approval of educational programs of higher education FSES3++, approved by the First Vice-Rector on 21.04.2021, Protocol No. 2;
- The Regulation on the procedure for reviewing the educational program of higher education bachelor's degree programs, specialty programs, master's degree programs, approved by the Rector on 01.09.2020, Protocol No. 1.

The EP is reviewed with the participation of stakeholders and changes are made in terms of the content of the work programs of disciplines, the fund of evaluation tools, methodological materials, etc.:

- Minutes of the meeting of the Council of Employers of GSOTU No. 2 dated 03.06.2021.
 The question of compliance of the quality of the EP with the requirements of the modern labor market.
- Protocol No. 1 of the meeting of the IT Department dated 30.08.2018, the state of science and technology is systematically monitored during the implementation of the EP, which allows timely changes to the MEP.
- Extract from the minutes of the meeting of the Council of Employers of GSOTU No. 2 dated 03.06.2021. The question of compliance of the quality of the EP with the requirements of the modern labor market.

- Extract from the minutes of the meeting of the Academic Council of GSOTU No. 1 dated 02.09.2019. The question of amendments to the OP 09.03.02 "Information systems and technologies" in the field of changes in the orientation (profile) of the EP.

In order to take into account, the opinion of students on the management of an educational organization and when an educational organization adopts local regulations affecting the rights and legitimate interests of students at the University, there is a Trade Union Committee and a Joint Council of Students (JCS). The JCS is a collegial body of the University's student self-government. The Chairman of the JCS is a member of the Academic Council of the University. The Chairman of the Trade Union Committee is a member of the Academic Council of the University. The Trade Union Committee and the JCS oversee issues of social and material support for students. Representatives of students of EP 09.03.02 "Information systems and technologies" are members of the scholarship commissions of institutes and the University.

The achievement of goals within the framework of the survey is monitored during the entire training period through the use of evaluation materials from the evaluation fund (EFF), including with the participation of representatives of leading employers in the region. Evaluation tools are presented in the form of competence-oriented funds of evaluation tools (EFF) developed by departments for the current control of students (including practice), intermediate and final state certification. The development and updating of the EFF is carried out in accordance with the Regulations on the Fund of Evaluation Funds (approved. Acting Rector 08.11.2018, Protocol No. 2), the Regulation on the formation of the evaluation fund for the ongoing monitoring of academic performance and interim certification (approved by the Rector 23.01.2020, Protocol No. 1), approved by the Evaluation Fund for the state final certification (approved by the First Vice-Rector 01.09.2020, Protocol No. 1).

The conclusions of the EEC on this standard were confirmed in reports and dialogues held at meetings with the administration and employees of GSOTU departments:

- Interview with the rector of GSOTU dated 26.10.2021;
- Interview with the vice-rectors of GSOTU dated 26.10.2021.;
- Interviews with the heads of structural divisions of GSOTU from 10/26/2021;
- Interviews with directors of institutes from 10/26/2021;
- Interviews with heads of departments from 10/26/2021;
- Interviews with graduates of the EP from 10/27/2021;
- Interviews with employers of the EP from 10/27/2021.

Analytical part

Educational programs as a set of documents are reviewed and updated annually in accordance with the level of development of science, technology and the needs of all stakeholders. The procedure for updating is defined by federal legislation, internal documents in accordance with the Regulations on Internal Independent Assessment of the Quality of Education, organization standards, Regulations on the intra-university system for monitoring the quality of education, approved by the Rector and the First Projector of GSOTU on 26.06.2021 and 24.09.2020 and is controlled by the state. The achievement of goals within the framework of the EP is monitored throughout the entire training period.

Feedback on the implementation of improvements in the implementation of the EP 09.03.02 "Information Systems and Technologies" is provided by constant monitoring and self-examination procedures of both the University as a whole and the EP.

The use of an electronic educational environment contributes to the efficiency of monitoring and comprehensive assessment of the EP and is provided with confirmed high qualifications of employees using it.

Based on the results of the study of the self-assessment report and the results of the online visit to the university, *the commission notes the following areas of further improvement*: it is necessary to develop a mechanism for more active involvement of students, graduates and employers in the procedures for quality assurance of the content and implementation of the educational program; activation of the participation of students, graduates and employers in the procedures for assessing the quality of educational programs.

Recommendations for EP 09.03.02 "Information systems and technologies":

- The management of the university and the management of the EP 09.03.02 "Information systems and Technologies" conduct explanatory work among students, graduates and employers on the importance of conducting a questionnaire to improve the quality of the internal content of educational programs, with the reflection of the work done in the protocols of collegial management bodies.
- Annually analyze the results of the survey of students, graduates and employers of the
 Department 09.03.02 "Information systems and Technologies" in order to identify
 recommendations and suggestions for improving the quality of the content and
 implementation of the department, with the data reflected in the minutes of the department
 meetings.

The conclusion of the EEC according to the criterion of the standard "Continuous monitoring and periodic evaluation of programs" for EP 09.03.02 "Information systems and Technologies" is a satisfactory position.

6.10. ESG. Part 1. Standard "PERIODIC EXTERNAL QUALITY ASSURANCE PROCEDURES"

The educational organization must undergo external quality assurance procedures in accordance with European Standards and Recommendations (ESG) on a regular basis.

The evidentiary part:

Periodic external quality assurance procedures allow evaluating the effectiveness of internal quality assurance processes. The external quality assurance procedure has different forms and is carried out at different levels. An external assessment of the quality of the implementation of the EP in the field of training is revealed in the state accreditation procedure - it is carried out periodically once every 6 years. In the period from February 01 to February 05, 2016, the University conducted a state accreditation examination for all major educational programs. In 2019 a state accreditation examination was conducted for higher education programs - master's and postgraduate studies (order No. 1075 of July 24, 2019). A certificate of state accreditation was received on March 10, 2016. registration number 1731 series 90A01 No. 0001824 (valid until March 10, 2022). Participation in the federal monitoring of the quality of education - 2 times per calendar year.

When implementing the EP, the mechanisms of functioning of the training quality assurance system established at the University are used, including: monitoring and periodic review of the educational program; ensuring the competence of the teaching staff; regular self-examination according to agreed criteria for evaluating activities; a system of external evaluation of the quality of the implementation of the EP; accounting and analysis of the opinions of employers and

graduates of the university; agreements with foreign partners on student and teacher mobility programs, etc.

Analytical part:

For GSOTU, the procedure of international accreditation according to European standards is carried out for the first time. It is necessary for the university to ensure that each university of the Russian Federation and all interested parties have access to information on the implementation of all recommendations and requirements that were made during the visit to the university and the study of the EP and the accreditation process.

Information technology is one of the most fundamental technical specialties today, which is recognized as <u>necessary</u> at the world level, but needs further improvement through the study of new technologies and modernizations in the field of digitalization of economic sectors, staff training, close cooperation in the field of research with well-known international institutions, staff mobility to European universities, international research centers.

Based on the results of the visit and the self-assessment report, <u>the commission notes the following areas for improvement</u>: it is necessary to start purposeful work on harmonizing the content of work programs, taking into account the international experience of the best universities in the field of EP, as well as international professional associations, for example *Computer Curriculum*-2020.

Recommendations for EP 09.03.02 "Information systems and technologies":

- In accordance with paragraphs 5, 8, 11 of Appendix 2 "Programs of strategic development of M.D. Millionshchikov State Technical University until 2030", the management of the EP 09.03.02 "Information Systems and Technologies" is recommended to design the MEP, harmonizing the content of modules / disciplines with the programs of the best foreign and domestic universities.
- To ensure the availability of information to the public about the implementation of recommendations and requirements at the university based on the results of the external evaluation procedures of EP 09.03.02 "Information systems and Technologies".

The conclusion of the VEC according to the criterion of the standard "Periodic procedures for external quality assurance" for 09.03.02 "Information systems and Technologies" is a satisfactory position.

(VI) OVERVIEW OF STRENGTHS/BEST PRACTICES FOR EACH STANDARD

For EP 09.03.02 "Information systems and technologies":

The standard "Quality Assurance Policy"

Strengths/best practices have not been identified.

The standard "Development and approval of the program"

Strengths / best practices have not been identified.

The standard "Student-centered learning and assessment of academic performance" has no strengths / best practices.

The standard "Admission, academic performance, recognition and certification of students" Strengths / best practices have not been identified.

The standard "Teaching Staff"

Strengths / best practices have not been identified.

The standard "Educational Resources and Student Support Systems"

Strengths/ best practices have not been identified.

The Information Management Standard

has not identified any strengths/best practices.

The standard "Informing the public"

• A sufficiently well-developed website of the university, which allows interested persons to get acquainted with such aspects of the university's activities as: educational, research, socio-educational, international, educational and methodological, etc., with the transition to the location of all regulatory and methodological, legal, statistical and other databases, with the attachment of all approved documents and appendices.

The standard "Continuous monitoring and periodic evaluation of programs"

Strengths / best practices have not been identified.

The standard "Periodic external quality assurance procedures"

Strengths/best practices have not been identified.

(VIII) OVERVIEW RECOMMENDATIONS FOR QUALITY IMPROVEMENT FOR EACH STANDARD

Recommendations for EP 09.03.02 "Information systems and technologies":

The standard "Quality Assurance Policy"

- The management of the university, by the beginning of the 2022-2023 academic year, to develop with the participation of external stakeholders, approve, implement and publish the Quality Assurance Policy of the university, which should be coordinated with the overall Development Strategy of the University.
- The management of the university, to analyze and systematize the impact of risks on the activities of the university. Based on the analysis to develop a long-term plan (for 5 years) to prevent and overcome risks by the end of the current academic year, in order to improve the activities of the university and improve the quality of educational services and to begin its implementation from 2022-2023 academic year.
- The management of the University, IAIT and the IT Department to develop and implement a set of information measures to popularize the programs of academic mobility of students and teachers and their impact on improving the quality of education.
- The management of the EP 09.03.02 "Information Systems and Technologies" should include in the department's work plan a section with assessment and management of possible risks in the implementation of the EP, indicating possible consequences in case of non-acceptance and

(or) timely response measures, as well as a description of risk management mechanisms and measures and begin its implementation from 2022-2023 academic year.

Standard "Development and approval of the program"

- The management of the EP 09.03.02 "Information Systems and Technologies" is recommended, in addition to national experts, to involve representatives from international experts, foreign educational organizations, foreign professional communities, etc. in reviewing and conducting external examinations of the MEP.
- The management of the EP 09.03.02 "Information Systems and Technologies" is annually recommended to conduct external examinations of the MEP with the introduction of specific proposals in the documents, as well as to involve representatives from students and graduates in the development and revision of the EP 09.03.02 "Information Systems and Technologies", with the reflection of the issues under consideration in the minutes of the meeting of collegial management bodies.
- It is important for the management of the EP 09.03.02 "Information Systems and Technologies" to disseminate materials in various media about any planned or taken actions related to the implementation of the EP, including the results of the revision and amendments to the MEP.
- To the management of the EP 09.03.02 "Information Systems and Technologies", to expand the involvement of members of the Alumni Association in conducting external examinations of the EP, cooperation in organizing practices, scientific and industrial research with the reflection of the issues under consideration in the minutes of the meeting of collegial management bodies.

The standard "Student-centered learning and assessment of academic performance"

- To form more flexible individual trajectories of students, the educational and methodological management of the university, together with the management of the EP, to analyze the content of the EP 09.03.02 "Information systems and technologies" to consider the possibility of increasing the number of elective disciplines in the MEP, with the reflection of the results of the analysis in the minutes of the meeting of collegial management bodies.
- The management of the EP 09.03.02 "Information Systems and Technologies" is recommended to annually monitor the applied teaching methods of specialized disciplines in order to improve the quality of teaching, consider and implement proposals for the introduction of new teaching methods, with information reflected in the minutes of department meetings, as well as broadcast the results of their own research, implemented in the educational process, on the university's web resource.

The standard "Admission, academic performance, recognition and certification of students"

• The management of the EP is recommended to determine indicative indicators in the planning documents and plan for the next 5 years activities to implement the item: "Participation of students in the program "incoming and outgoing / external and internal academic mobility", including in an online format, as well as to develop measures to promote mobility among students of the EP.

Standard "Teaching staff"

• The management of the EP 09.03.02 "Information Systems and Technologies" is recommended to determine indicative indicators in the planning documents and plan for the next

5 years activities to implement the item: "publication of the UML, including in English", and begin implementation from the 2022-2023 academic year.

- The management of the EP 09.03.02 "Information Systems and Technologies" to organize advanced training in the field of teaching methods (didactics) and rhetoric for young teachers, including the appointment of experienced mentors from IAIT teaching staff, trial and open lectures, methodological seminars, etc.
- The management of 09.03.02 "Information Systems and Technologies" is recommended to develop an action plan aimed at developing professional cooperation with foreign educational organizations in the profile "Information systems and Technologies", to determine indicative indicators in planning documents and plan for the next 5 years activities to implement the item: "Participation of teaching staff in programs: external and internal/outgoing and incoming academic mobility, participation in international grant programs", including in online format, and to begin implementation from the 2022-2023 academic year.

The standard "Educational resources and Student Support systems"

- The University management should consider the relevance of the transition to an electronic educational information system (EIS) with the possibility of interactive interaction between students and teachers (e-Moodle, etc.), which is especially relevant for the conditions of the pandemic and to minimize the risks associated with the use of e-mail.
- The management of EP 09.03.02 "Information Systems and Technologies", in order to avoid undesirable risks, gradually switch from Open Source software to modern professional licensed software used in the industry, including through the registration of partnerships with leading software manufacturers.

Information Management Standard

• The university management is recommended to modernize the electronic information and educational system by the beginning of the 2022-2023 academic year, ensuring interactive interaction between all participants in the educational process, including between teaching staff and students, in all areas of the university's activities.

The standard "Informing the public"

• The management of the EP 09.03.02 "Information Systems and Technologies" needs to keep up-to-date the English version of the institute and department pages to inform about their activities and maintain their image at the international level.

The standard "Continuous monitoring and periodic evaluation of programs"

- The management of the university and the management of the EP 09.03.02 "Information systems and Technologies" to conduct explanatory work among students, graduates and employers on the importance of conducting a questionnaire to improve the quality of the internal content of educational programs, with the reflection of the work done in the protocols of collegial management bodies.
- Annually analyze the results of the survey of students, graduates and employers of the Department 09.03.02 "Information systems and Technologies" in order to identify recommendations and suggestions for improving the quality of the content and implementation of the department, with the data reflected in the minutes of the department meetings.

Standard "Periodic external quality assurance procedures"

- In accordance with paragraphs 5, 8, 11 of Appendix 2 "Programs of strategic development of Grozny State Oil Technical University named after M.D. Millionshchikov until 2030", the management of the EP 09.03.02 "Information Systems and Technologies" is recommended to design the MEP, harmonizing the content of modules / disciplines with the programs of the best foreign and domestic universities.
- To ensure the availability of information to the public about the implementation of recommendations and requirements at the university based on the results of the external evaluation procedures of EP 09.03.02 "Information systems and Technologies".

(IX) OVERVIEW RECOMMENDATIONS FOR THE DEVELOPMENT OF THE ORGANIZATION OF EDUCATION

During the work of the EEC, interviews were conducted with all participants in the educational process and structural units.

Based on the results of online communication with teaching staff, students and the University administration, convincing data were obtained indicating the systematic nature of work to improve the quality of education, student learning conditions, the work of teaching staff and other university structures.

The members of the External Expert Commission of the Independent Accreditation and Rating Agency for the further dynamic development of the University, strengthening its position in the global educational space and ensuring high quality of educational services <u>recommend</u>:

- 1. To analyze and systematize the impact of risks on the activities of the university. Based on the analysis, develop a long-term plan to prevent and overcome risks in order to improve the university's activities and improve the quality of educational services
- 2. To expand the areas of cooperation as well as the geography employers (including regional companies), in the framework of the concluded agreements and memoranda of cooperation not only with respect to their performance as the bases of practice, but also to create joint research laboratories, basic departments, training and production centers, etc.
- 3. To develop a program to implement and enhance academic mobility of students and teachers in all educational programs.
- 4. Consider the possibility of carrying out a more in-depth study of the English language both within the framework of the EP and the organization of additional training in foreign languages.
- 5. Create a working group to study the experience of partner universities and develop a medium-term program to translate the experience of partner universities into the educational trajectories of accredited programs at all levels.
- 6. To activate the activities of the Alumni Association with the involvement of the Association in university projects.
- 7. To develop in the medium term a system of attracting employers to manage EP along with the academic environment and students.
- 8. To develop a mechanism to stimulate the use of teaching staff of online learning technologies based on electronic courses of disciplines, MOE and other ICTs, to provide advanced training courses for university teaching staff in the field of development and application in the educational process of courses of MOE, Coursera, etc.

Appendix 1. Evaluation table "PROGRAM PROFILE PARAMETERS"

Conclusion of the external expert commission on the assessment of the quality of the educational program 09.03.02 "Information Systems and Technologies" of the Grozny State Oil Technical University

named after Academician M.D. Millionshchikov

	The position of the organization of education			
№ International HAAR ESG Standards Part 1.	Strong	Satisfactory	Suggests improvement	Unsatisfactory
Standard 1. QUALITY ASSURANCE POLICY				
An educational organization should have a published quality assurance policy that is part of its strategic management. Internal stakeholders should develop and implement this policy through appropriate structures and processes involving external stakeholders.			+	
Standard 2. DEVELOPMENT AND APPROVAL OF THE PROGRAM				
An educational organization should have mechanisms for developing and approving its programs. Programs should be designed in accordance with the set goals, including the expected learning outcomes. The qualifications obtained as a result of mastering the program should be clearly defined, as well as explained, and should correspond to a certain level of the national qualifications framework in higher education and, consequently, the qualifications framework in the European Higher Education Area.		+		
Standard 3. STUDENT-CENTERED LEARNING AND ASSESSMENT OF ACADEMIC PERFORMANCE				
The educational organization should ensure the implementation of the program in such a way as to encourage students to play an active role in the joint construction of the educational process, and that the assessment of students reflects this approach.		+		
Standard 4. ADMISSION, ACADEMIC PERFORMANCE, RECOGNITION AND STUDENT CERTIFICATION				
The educational organization must have pre-defined, published and consistently applied rules governing all periods of the student "life cycle", i.e. admission, academic performance, recognition and certification.		+		
Standard 5. TEACHING STAFF				

5	The educational organization should have objective and transparent				
	recruitment processes and professional growth and development of all				
	staff, which allow them to ensure the competence of their teachers.		+		
Stand	lard 6. EDUCATIONAL RESOURCES AND SYSTEM				
STUDENT SUPPORT					
6	The organization of education should ensure that sufficient, accessible				
	and appropriate educational resources and student support services are		+		
	available.				
Standard 7. INFORMATION MANAGEMENT					
7	An advectional agreement on most arrows that it called a malares and				
/	An educational organization must ensure that it collects, analyzes and uses relevant information to effectively manage its activities and its				
	educational programs.		+		
	educational programs.				
Stand	lard 8. INFORMING THE PUBLIC				
Stant					
8	The educational organization should inform the public about its				
	activities (including programs). The information provided must be clear,	h			
- 4	reliable, objective, up-to-date and accessible.	-			
All					
Stand	lard 9. CONTINUOUS MONITORING AND				
PERI	ODIC EVALUATION OF PROGRAMS				
9	The educational organization should monitor and periodically evaluate		h		
	programs in order to ensure that they achieve their goal and meet the				
	needs of students and society. The results of these processes should lead				
	to continuous improvement of programs. All stakeholders should be		()		
	informed of any planned or undertaken actions regarding the programs.				
Stand	lard 10. PERIODIC EXTERNAL MONITORING PROCEDURES				
	LITY ASSURANCE		6		
10	The educational organization must undergo external quality assurance				
	procedures in accordance with European Standards and		+		
1	Recommendations (ESG) on a regular basis.				
				_	
	Total	1	8	1	0