FINAL REPORT

ON THE EXTERNAL EVALUATION

of a study programme

"Comprehensive Data Analysis in Petroleum Geology"

in the field of study

"Geology" (05.04.01)

,

delivered by Kazan (Volga region) Federal University

accredited 06/2017 – 06/2023

Kazan, 2017

Content

Kazan Federal University (KFU) commissioned **evalag** and the National Centre for Public Accreditation (NCPA) with the external evaluation of the 2nd cycle Master's degree programme Complex Data Analysis in Petroleum Geology at KFU in Russia. The programme evaluation was carried out by an international expert panel who assessed the study programme (SP) according to the Guidelines for joint International Accreditation, which comply with current Russian legislation in the sphere of education, German legislation and the main principles and documents of the Bologna process as well as the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG) and the Federal State Educational Standards (FSES) in the Russian Federation (RF). The objective of this international accreditation is to evaluate and recognise the high quality of higher education and to state the conformity of the SP to the standards and criteria for international programme accreditation established jointly by **evalag** and NCPA. Moreover, it is intended to enhance the competitiveness of the offered SPs of the globally recognised federal state autonomous educational institution of higher professional education Kazan (Volga Region) Federal University by accrediting the programme and awarding **evalag**'s international quality label to the SP.

1. Kazan Federal University (KFU)

Established in 1804,KFU is the second eldest and largest university in Russia. It is located in Kazan, the capital city of the autonomous Republic of Tatarstan, which is roughly 800 kilometres east of Moscow. As a state-licensed higher education institution, KFU offers full- and part-time Bachelor's degrees (1st cycle) and Master's degrees (2nd cycle) directed towards professional and academic activity as well as postgraduate (PhD) degrees (3rd cycle) in certain fields. KFU is licensed and accredited by the Ministry of Education and Science to hold educational activities in the field of higher education (License № 1664 dated from 22.09.2015, Series 90Л01 №0008676, permanent; Certificate of State Accreditation, № 1539 of 01.12.2015 valid till 25.03.2021. Series 90A01 №0001632).

As an internationally acknowledged centre of academic excellence, KFU is listed among the top ten institutions of higher education in Russia. There are fourteen institutes, two faculties, three higher schools and three branches in the nearest cities, which provide a wide spectrum of degree programmes in all fields of study. The university carefully preserves the traditions of its scientific schools of Mathematics, Physics, Chemistry, Biology as well as Orient Studies. Over the last decade, it has succeeded in conducting cutting-edge research in the areas of Nanotechnologies and Biomedicine, Psychology and Cultural Studies as well as Humanitarian Technologies.

There are 46,500 students enrolled at KFU, which offers 479 SP, among them 85 doctoral SP, eight joint degree programmes and nine English-language degree programmes. Currently, 3,216 international students from 90 countries study at KFU.

Main academic units of the university are:

- Institute of Geology and Petroleum Technologies
- Institute of Fundamental Medicine and Biology
- Institute ofEnvironmental Sciences
- Alexander Butlerov Institute of Chemistry
- Faculty of Law
- Institute of International Relations, History and Oriental Studies

- Leo Tolstoy Institute of Philology and Intercultural Communication
- Institute of Psychology and Education
- Institute of Social and Philosophical Sciences and Mass Communications
- Institute of Management, Economics and Finance
- Higher School of Public Administration
- Higher School of Business
- Physical Education and Sports Academic Unit
- Higher School of Information Technologies and Information Systems
- Institute of Engineering
- Institute of Computational Mathematics and Information Technologies
- Lobachevsky Institute of Mathematics and Mechanics
- Institute of Physics
- Faculty of Advanced Training and Staff Retraining
- Institute of Continuing Education
- Preparatory School for International Students
- Interdisciplinary Center for Analytical Microscopy
- Scientific and Educational Center of Pharmaceutics
- Medical Simulation Center
- Naberezhnye Chelny Institute
- Yelabuga Institute

Geological education started at KFU from the very foundation. A separate Faculty of Geology was organised in 1949 and transformed into the Institute of Geology and Petroleum Technologies (IGPT) in 2011, which is one of KFU's growth points. The structure of this institute includes the following seven specialized departments:

- Research and Training Centre for Natural Bitumen Development
- Research and Training Centre for Aerospace Technologies
- Research and Training Centre for Engineering
- Geological and Geophysical Investigations
- Research and Training Complex "Petrophysics"
- Centre of Training Bases and Expeditionary Works
- Magnet Observatory

At the present time, the IGPT teaches over 800 under- and graduate students in five Bachelor and eightMaster programmes in Geology. Eleven students were currently enrolled in the Master degree programme Complex Data Analysis in Petroleum Geology among them ten Russian students and one student from the Republic of Kazakhstan in the first term. In the second term, three students are enrolled right now: two international students - one citizen of the Syrian Arab Republic and one citizen of Bolivia as

well as one student from the RF. There have been no students studying part-time and no graduates of this SP yet.

The Institute offers its students the following SP:

Bachelor's degree programmes	**Master's degree programmes**	**Doctoral (PhD) specialities**	**Non-degree awarding programmes**
Geology	Modern Geophysical Technologies of prospecting and exploration of Hydrocarbon deposits	Geophysics and Geophysical Methods of Investigations	Language, Academic and Training programs
Geophysics	Prospective Geoinformation Technologies in Geology and Geophysics		Summer Schools
Geology and Geochemistry of Fossil Fuels	Geology and Geochemistry of Oil and Gas	Geology, Prospecting for Oil and Gas Deposits	
Hydrogeology and Engineering Geology urbanized Areas	Exploration of High viscosity Oil and Natural Bitumen	Lithology	
Oil and Gas Business	Stratigraphy (joint educational program with TU Bergakademie Freiberg (double degree))	Palaeontology and Stratigraphy	
	Engineering Geology and Hydrogeology of urbanized areas	Hydrogeology	
	Complex Data sis in Petroleum Geology[1]	Geology	
	Geology of Mineral deposits	Mineralogy, Crystallography	

Table 2: SPs of the Institute of Geology and Petroleum Technologies.

[1]Currently, a double degree programme with the French Petroleum Institute IFP School in Paris is being developed.

Responding to the need of the society, labour market and the feedback from employers, the SP of KFU are, according to the self-evaluation report and conversations on site with the programme directors and managers, continuously developed and updated. The contents of the SP are regularly revised in order to broaden the competencies of the graduates and to provide young people with the knowledge and skills necessary to build a successful career.

2. Complex Data Analysis in Petroleum Geology Programme

The programme Complex Data Analysis in Petroleum Geology carried out by the ICPT was created in 2015 for international students and is taught in English. Today, the ICPT is one of the leading centres in Russia in the field of studying the structure of hydrocarbon deposits, core material and the fluids in surrounding rocks as well as the use of physical methods of rocks and minerals investigation.

The objective of the SP is training Master's degree students of 05.04.01 Geology major in accordance with the requirements of HE FSES approved by "Order No. 912" of the Ministry of Education and Science of the RF of August 25th, 2017. This regulation states the principles of the design, structure, contents, procedure development and approval of the professional SPs and is used to establish the uniform procedure for their elaboration. Compliance of the intended learning outcomes with the qualification in the SP Complex Data Analysis in Petroleum Geology is confirmed by the Certificate of State Accreditation No. 1539 of December 1st, 2015 issued by the Federal Service for Supervision in the Sphere of Science and Education.

The mission of IGPT is high quality education in the field of Earth and Petroleum sciences. Their philosophy of work rests on key features as interdisciplinary, employment of the entire university's potential, ambitiousness in setting goals, uniqueness, recognition and liaison with market leaders, large companies and leading universities.

The programme offers students a practice-oriented education and provides a wide range of scientific approaches to prepare students for the Master's research work. Tutors of the programme are leading KFU professors and specialists from several oil servicing companies. The institute invests heavily in forward-thinking solutions of exploration and development of complex hydrocarbon reservoirs using game-changing technologies of formation stimulation.

Internationally recognised research areas developed in the institute are:

- Physics of minerals and their synthetic analogues
- Paleomagnetism
- Stratigraphy and paleontology of the Permian system
- Oil-bearing capacity of ancient platorms
- Lithology and Earth's crust minerals
- Exploratory Geophysics
- 3D modelling of oil and gas fields

A Master's degree enables graduates to work as specialists and managers in their field of study in state and non-state organisations in Russia as well as abroad and gives ac-

cess to doctoral degree studies. The SP is developed in compliance with the demands of KFU's clients and companies. Graduates work in research institutions (e.g. TatNIPINeft and KFU laboratories), in oil and gas exploration companies (e.g. Rosneft, Surgutneftegaz, Gazprom, Lukoil, Tatneft, Zarubezhneft and Total), in oil service companies (e.g. Schlumberger, TNG Group, BNGF and Halliburton) and are qualified for leading research teams as well as for consultant work in the field of petroleum geology.

The programme is offered in full- and part-time study mode with a duration (full-time) of two years (4 terms) and a total credit point number of 120 ECTS. The estimated student workload is 36 hours per study credit.

Cost of education sum up to 260,000 RUB (~ 4,188 EURO) per year for foreigners and 150,000 RUB (~2,416 EURO) per year for Russian citizens.

3. Evaluation and Accreditation Process

The programme evaluation was carried out with a peer review based on a self-evaluation report (according to the Methodology for Evaluation of Higher Education SPs and **evalag's** and NCPA's key principles and criteria catalogue) provided by KFU, a site visit and subsequentassessment report of the international expert panel and the accreditation decision by **evalag's** Accreditation Commission as well as NCPA's National Accreditation Board.

For conducting the international accreditation of the SP, the independent external evaluation panel was formed consisting of two Russian experts enlisted by NCPA (an expert representing the RF academic community and a student representing the RF student community), and two German experts (an expert representing the international academic community, and an expert representing the international employer community) enlisted by **evalag**.

Experts from the academic community:

- Dr. Galina Kuznetsova, Associate Professor of the Department of Petroleum Field Geology at Gubkin Russian State University of Oil and Gas in Moscow (Review Chair).
- Prof. Dr. Joachim Rohn, Professor for Applied Geology at the University of Erlangen in Germany (Deputy Review Chair).

Expert from the international employer community:

- Dr. Ludwig Stroink, Scientific Director and head of the International Affairs Office at the German Research Centre for Geosciences Potsdam, Germany

Expert from the student community:

- Ivan Pasechny, 1st year Master's degree student, Faculty of Control and Automation, Institute of Automated Control Systems and Information Technologies at Kazan National Research Technological University in Russia.

The site visit took place on 13th to 15th March, 2017 at KFU in Russia. During the site visit, the expert team met with the members of KFU rectorate, heads of departments, academic and administrative staff, graduates and students. They visited the library, seminar rooms and laboratories used by the students of the programme.

The expert team produced an assessment report of the programme with an accreditation recommendation, which was submitted to **evalag**'s Accreditation Commission, who took the final accreditation decision on June 26th, 2017 and NCPA's Accreditation Board, whose decision was taken on June 30th, 2017.

Amanda Zeitz coordinated the accreditation from the side of **evalag** and experienced extraordinary support from the deputy head of the Accreditation office of NCPA, Oksana Matveeva.

The following assessment report is structured along the six standards and criteria of thejoint international accreditation by **evalag** and NCPA. Each chapter starts with a description of the current status regarding the criterion based on the information in the self-evaluation report of the university and the information gathered during the site-visit. On this basis, the expert team assesses the criterion and finally list their recommendations for further improvement.

4. Programme Assessment

4.1 Programme Profile

Current situation

The self-evaluation report describes the aims and intended learning outcomes of the SP and links them to the curriculum. The programme intends to give strong basics of knowledge of geology, geophysics as well as geological and dynamic modelling. Students gain extensive knowledge of sedimentological and basin analysis, interpreting geophysical methods and integrating data into single geological model and run reservoir simulation taking geo-mechanical properties into account.

The programme at KFU is being implemented within the framework of solving educational problems of the Strategic Academic Unit (SAU) Econeft, which comprises several geo-relevant units of KFU with the aim of fostering interdisciplinary research and education. One of the principles of the educational environment established within this unit is rapid education, e.g. formation of new competencies based on research outcomes of SAU Econeft. Thus, the students are mastering additional competencies: the ability to build geological, hydrodynamic and geo-mechanical models of deposits using a wide range of geological and geophysical data and the ability to assess the prospects of use of various methods of enhanced oil recovery in the specific geological conditions. The objectives of the SP, the contents of requirements, the conditions of implementation and the list of competencies to be formed with the students in the course of training are given in the Basic Professional SP adopted at a meeting of the relevant department approved by the Academic Council and by the head of the institute.

The intended learning outcomes describe professional knowledge and competencies as well as general and soft skills. In the syllabi, students find the intended learning outcomes of the course related to the intended learning outcomes of the SP. They are stated as follows (excerpt):

Generic learning outcomes:

- Graduates have the ability for abstract thinking, analysis and synthesis.
- Graduates show the willingness for self-development, self-realisation and usage of creative potential.

- Graduates are able to expand and deepen the scientific outlook.
- Graduates have the ability to independently acquire, interpret, organise and use new knowledge and skills in professional work and to develop their innovative capacity.
- Graduates have the ability to critically analyse, represent, defend, discuss and disseminate the results of their professional activity.
- Graduates possess skills of creating and formulating scientific and technical documentation, scientific reports, reviews and articles.
- Graduates are provided with an opportunity to get an international education through their studies in Paris and Kazan.

Subject specific learning outcomes (excerpt):

- Graduates will be provided with a full-fledged education in the field of Geology.
- Graduates are trained as specialists capable of using modern technology to create and develop new research directions in the field of earth sciences.
- Graduates are able to professionally operate with modern field and laboratory equipment and devices in the subject specific fields.
- Graduates are very well acquainted with modern problems of theoretical geology, basic theories and hypotheses of origin and geological evolution of the earth and their development trends as well as the global pattern formation and crustal structure.
- Graduates should be able to analyse up-to-date information about geological structures and geological development of the earth in terms of existing theories and hypotheses, identify key trends in the development of geological science and its divisions.
- Graduated should own methods of system analysis of geological, geochemical and geophysical data as well as geological information processing skills.
- Graduates should demonstrate the ability to use acquired knowledge to solve theoretical and practical problems of modern geology.
- Graduates should be able to generate decisions of professional tasks by integrating gained fundamental geological sciences and specialised knowledge.
- Graduates have the ability to create and analyse models of the study objects based on the use of theoretical and practical knowledge.
- Graduates are able to use modern high-performance technologies in the field of subsoil use and management of natural resources of Russia.

The aims and intended learning outcomes of the programme are based on academic and professional requirements, public needs and needs of the Russian and international labour market. Regarding the further development of the SP, the interests of employers are taken into consideration.

Qualifications and practical work experience of the academic staff of the programme correspond to the profile and goals of the programme. The teaching staff covers all areas and disciplines of the SP.

The SP is arranged in a way that enables consistent development of students' theoretical knowledge and in-depth training of their practical skills. As part of the practical training, students participate in KFU's International Summer School, which provides students with the opportunity to get a first insight into real-life work settings. At the second stage of the practical training, students were working at Research and Education Centre TRIZ Simulation at KFU.

Apart from that, most of the students of the SP work for local and national companies and are directly involved in company projects while studying. Thus, the training of practical skills is combined with scientific research. The university continuously develops new programmes and educational strategies in order to meet the demands of the labour market, stakeholders' expectations and to sustain the university's mission. Representatives of organisations to be the potential employers are not only delivering elective courses but are also involved in the development and annual updating of the SP.

Graduates are mostly absorbed by the local and regional job market granting prospects for successful careers. KFU's employment rate upon graduating is 97%. Graduates hold senior positions in major respectable geological organisations and are recognised by their outstanding professional and personal qualities.

The programme objectivesand intended learning outcomes are publicly accessible on the university's website.

Assessment

According to the expert team, the contents and the qualifications offered by the SP are clearly described and well-defined. The professional orientation of the programme is precisely set out and both academic and professional requirements of graduates in the field of geology are met. The learning outcomes on the programme as well as the course level are consistent with the university-type studies.

Students are well informed about the learning outcomes in the course descriptions, which are publicly accessible on the website of KFU as well as through individual student accounts online.

Furthermore, the aims of the programme and its learning outcomes are based on the public needs and the demands of the Russian and international labour market. The SP corresponds excellently to the industrial needs since it is rooted on applied problems in cooperation with different companies. The programmes' aim of employability in industry, institutions as well as the university sector is realised in an excellent manner. The expert team values the outstanding opportunities of the future graduates, which are linked to the practice-oriented education as well as the excellent strategic academic unit Econeft. Employers, who participated in the site visit, confirmed the very good qualification of the graduates and their ability to incorporate themselves in specific fields. This is seen as a win-win-situation since students do their research on relevant subjects for the industrial partners earning money while studying.The experts highlight the strong research component implemented in the SP. KFU is systematically engaged in scientific research and methodological activity.

Moreover, the experts accentuate the positive linkages of employers to the active development of the SP. These widespread practical experiences are an enrichment for the SP, because they are adequately integrated in course units and examinations.

The SP involves heads and key staff of the field-oriented organisations, enterprises and institutions into the process of study. The staff of the faculty with academic degrees involved in the programmes' delivery is highly qualified with necessary skills and work experience conformingto the profile and goals of the SP.

The objectives of the SP comply with the profile and strategic goals of KFU. Additionally, the intended learning outcomes correspond to the level of the awarded qualification and fulfil the European academic requirements.

KFU has the intention to attract more students from western countries with their international programmes, which is highly appreciated by the expert panel. The Specialisation of KFU in core competencies in the field of geology according to international standards is a successful way to attract more international students from Europe and western countries. Sincemost of the students come from central Asia, in the view of the experts, the international dimension of the programme could be improved with respect to a greater inclusion of European and northern American countries.

Recommendations

R1 The international dimension of the SP should be improved in terms of a greater involvement of European and northern American countries.

R2 It is recommended to enhance cooperation with other master programmes in Geology major.

4.2 Curriculum

Current situation

The curriculum and course contents are described in the self-evaluation report and – more detailed regarding content and work methods – in the syllabi as well as the programme description. The curriculum contains the schedule of academic process.

In the framework of the Strategic Academic Unit of KFU (SAU), which comprises several university units, among them the IGPT, the SP is continuously modernised and upgraded. Annual updates of the curriculum take place and if necessary, corrections related to new scientific and performance results are made. All amendments are discussed at the department meetings with the Academic and Methodological Panel as well as the Academic Board of the institute. These amendments are subject to the examinations for compliance with the HE FSES and are approved by the Vice-Rector for Educational Activities. The FSES requirements state the professional activities and competencies to be mastered by the students of the SP. In addition, when elaborating the SP, the institution has the right to extend the list of competencies formed, taking into account the programme focus on specific areas of expertise and activity.

The entire study period of two years is divided into four terms. There are examination sessions at the end of terms followed by vacations. The courses can be divided into several parts. Basic mandatory courses include geological courses, basic geophysical courses, modelling and fundamental problems of science. In the first term, there are also seminars on academic writing and methodology of geological sciences included. During the first term, students study eight disciplines within eighteen weeks including three examinations and four final tests at the end of the term.

Russian as a foreign language for international students is mandatory in the second term. There are Russian language training courses as well as the annual Russian language summer school for international students, which takes place in August and offers both a study and cultural programme. These courses give intensive practice in listening, speaking and reading. On top of that, there are pre-semester language intensive study courses available for an extra fee, but not required.

Practical trainingin form of an internship takes place withinin the framework of KFU summer schools after the first year of study. Therefore, campusesare located outside of Kazan citywithin the Centre of Suburban Training facilities. The internship in the field consists of gravity, magnetic and geo-electric surveys as well as seismology and is supervised by tutors. After successful submission of a final report and a final test, students get fifteen credit points. In 2016, the first stage of practical training was taken at the International Summer School GeoKazan-2016 attended by twenty young scientists from eight leading world universities (inter alia UK, USA, Germany and Russia). At the second stage, students are working as engineers at the Research and Education Centre TRIZ Simulation,which is the institute's division adequately equipped for both simulation work with sensitive data protection and for project-based learning to train specialists.

In the third term, students can chose elective courses, which make up one third of the term.The variable part makes it possible for students to extend and improve their knowledge and skills defined by the content of basic modules, allows the student to gain in-depth knowledge and skills for professional activity and for continuing professional training on the graduate and postgraduate level. The KFU "Regulation on Elective Courses" states a voluntary selection of electives in accordance with students' individual educational needs. Besides, students have the opportunity to study according to their individual curriculum governed by the "Regulation on the Procedure for Individual Curriculum Training at KFU".

A Master thesis on the basis of research work is compulsory in the fourth term. Together with the supervisor appointed at the department (to be stated in the minutes of the department meeting), students decide on their research area, the base (laboratory) as well as the topic of their Master's thesis and make up their individual plan of scientific activity. Research comprises the analysis of scientific literature, laboratory studies, data collection and analysis as well as the construction of geological models. It is completed after writing the Master's thesis in accordance with the requirements stated in the "Guidelines for Preparation, Writing and Execution of the Master's Thesis". There are no classes during the fourth term.

The programme covers all relevant aspects of the study field and provides profound knowledge of disciplines taught in the fields of petroleum geology. The conceptual-methodological basis of the programme consists of geological subjects, which foster analytical strategies and research methods as well as those of general value.

One RF credit is equal to one ECTS credit. The scope of the programme is 120 credits and lasts four semesters with workloads from 19 to 35 credits per semester. One credit point adopted in the Russian educational institution equals one unit labour intensity of study and other activities of the educational programme or curriculum equivalent to 36 academic hours, with one hour comprising 45minutes. The workload increasesfrom the first to the second semester and decreases in the last two semesters. After the first year of training, the weekly training load is 36hours. Together with the self-study, it does not exceed 54 hours. According to the students, the workload of the SP is reasonable.

Course names	Grading	Total workload
1 term		
Philosophy of natural science	Exam	3

Modern problems of economics, organisation and management in the prospecting surveys and sub-surface use	Exam	4
History and Methodology of Geological Sciences	Credit test	2
Academic writing	Credit test	2
Sedimentology	Exam	3
Carbonate Petroleum lithology	Credit test	1
Geoinformation technologies	Credit test	3
Elective Course - Management / Patenting / Project Management	Credit test	1
2 term		
Computer technologies in geology	Exam	3
Modern problems of geology	Exam	3
Foreign language	Credit test	2
Analysis of sedimentation basins	Credit test	3
Carbonate Petroleum lithology	Exam	2
Geochemistry in petroleum geology	Exam	3
Seismic interpretation	Credit test	2
Development of oil and gas fields	Credit test	2
Internship		15
3 term		
Interpretation of geophysical researches of wells	Credit test	2
Enhanced oil recovery	Credit test	2
Elective Course -Photogrammetry/The use of global satellite system (Glonass, GPS) in geodesy, cartography and navigation	Credit test	1
Elective Course - Petrophysics in Petroleum Geology/Modern technologies of logging	Exam	4
Elective Course - Geostatistics/Mathematical methods in geology	Credit test	2
Elective Course -Geological Modelling/Hydrodynamic Modelling	Exam	4
Elective Course - Unconventional resources / Directional drilling and geo-mechanics	Credit test	2
Research work		16
4 term		

Research work		12
Undergraduate practice		12
State final examination	Exam	9
Total number of credits		**120**

Table 2: Work Plan of Education (Report on Self-evaluation, Annex 1: Handbook for Research Master's Degrees, p.23-24).

Educational process is provided with a complete set of educational materials. The SP is taught in different educational forms: classroom learning, distance learning or its combinations. For assuring a student-centred teaching, new media are increasingly applied in the teaching- and learning process. Some courses are available online, so called MOOC (massive open online courses). Online and e-learning methods ensure that teachers can supervisestudents when they perform individual tasks.In the seminaries and lectures of the SP,a variety of teaching and learning methods are used.

In addition to traditional information sharing and graphical visualisations, methods of problem-based learning, case study and case reports as well as process-based learning and cooperative learning are applied. Courses (modules) are developed and implemented with the participation of specialists of companies, e.g. Schlumberger. The IGPT is often visitedby experts from the industry, foreign university teachersand scientists,who present the results of their research studies. Furthermore, students are encouraged by KFU to take part in national university conferences and international conferences.

Assessment

The expert team acknowledges thatKFU occupies a very good position to compete with international HEIs.While otherHEIs offer more traditional programmes, KFU has deliberately chosen and developed a very modern approach, which is highlyattractive for young students and scientists. The experts encourage the university to further pursue this strategy.

The courses of the SP cover all relevant contents and competencies to meet the SP's objectives and prepare graduates for their professional tasks with a great specialisation in the field of petroleum geology. Current developments in the field are reflected.

From the experts' standpoint, the curriculum is well-structured and logical. Subjects and course units are spread evenly, their themes are not repetitive and specialisations in core competencies are offered. Although the contents are covered extensively, in the view of the experts, KFU should find ways for more interfaces with the other six Master programmes offered parallel by the institute. Since all of these Master programmes have interfaces in the geological area, especially petroleum geology and petroleum engineering, joint courses should be integrated into the curriculum.

The practical training units in the professional fields are assessed as very refined by the experts.They are elated by the positive project work with existing and real data from companies, and especially by the university's encouragement of students to attend national and international conferences. The labour market orientation and the connection between theory and practiceis extremely well implemented. Nevertheless, the experts underscore the importance of field training and express their strong view to include more practical field work and excursions in the curriculum, particularly with regard to students entering the SP upon Bachelor's degree graduation in different SPs.

Especially for those students, additional courses should be offered. Besides, since there is only a small number of students, mostly PhD students, who attend conferences, KFU should ensure grants to enable more students to attendinternational scientific conferences.

The experts appreciate the variety of learning methods used in the curriculum and particularly the application of state-of-the-art software in the frame of this programme. In the interview with the students, they reiterated their wish for more hours to concentrate on specific software,above all reservoir modelling and PETREL. Thus, the experts emphasize the need for more hours dealing with thesespecial software.

Students' workload is consistent with the number of credits allocated to the respective component. The requirements for the content and structure of the Master's thesis are defined by KFU.However, the exact number of credits for the Master's thesis should be designated in the work plan of the SP in order to make it transparent for students.

Recommendations

R3 With regard to the interfaces all Master programmes offered at the institute have in common, joint courses should be offered and integrated into the curriculum.

R4 With permission to students entering the Master's programme upon Bachelor's degree graduation in another field of study, more field training modulesshould be included into the curriculum.

R5 Additional courses for students without educational geological background should be offered.

R6 KFU should allocate and ensure grants for students to enable them to attend-international scientific conferences.

R7 The exact number of credits for the Master's thesis should be designated in the work plan of the SP.

R8 It is advisable to promote the study programme more actively in order to attract students from Europe, Asia and America.

4.3 Student Assessment

Current situation

The assessment of students' learning outcomes is made in three main forms: a final test, a graded test and an examination. Students are informed of the maximum number of credits they can obtain and on the minimum score required for examinations or final tests permit in each discipline during the first week of the term.

KFU implements the following grading systems:

Numericalsystem	Numerical system (descriptively)	Merit-based system	Pass/Fail system	Grades
5	Excellent	86 – 100%	Passed	A
4	Good	71 – 85%	Passed	B

3	Satisfactory	55 – 70%	Passed	C-D
2	Fail	0 – 54%	Failed	F

Table 3: KFU Grading System (Source: Department of External Affairs).

Examinations include pass/fail tests (written, oral or in form of an essay) in order to check the level of mastering the disciplines in accordance with the curriculum, an exam, a report on the practical work and defence of the course project. The course examination during the academic year includes no more than ten exams and twelve pass/fail tests. Exam schedules are transparent online for students one month before examination. Master's degree students take seven examinations and nine final tests in the course of the formative attestation in the first year of study, two examinations and four final tests in the second year. The procedure for the final mark formation for the course examination or the course project is determined by the regulation"For the preparation and defence of the course project in the Federal State Autonomous Educational Institution of Higher Education Kazan (Volga) Federal University" as well as by the orders of the course project organisation in the institutes and their departments.

The monitoring of students' learning outcomes is governed by the "Regulation on the Current and Formative Control", which establishes a uniform procedure for the current check of attendance and formative assessment, the types and time of tests and the system of evaluation. The formative assessment is made in accordance with the schedule of the academic process during the final tests and examination sessions. Each student has a personal record card within the computerized system "The Student". The scores of the current and formative assessment as well as examination results are entered into the system within ten work days after the end of the course examination period by the dean's office and displayed to the students.

Forms of the current control include: self-guided (home) work, practice, lab work, tests, colloquia, computer testing, reports, essays, oral questioning, discussions, trainings, and round tables, the course work/project and research work as well as individual and group counselling. The respective form of the current control is established by the teacher and is recorded in the programme of discipline or practice. Evaluations of the students' work, the degree of assimilation of the theoretical knowledge and skills, the level of creative thinking, independent work skills and the ability to apply them in solving practical problems are tested with exams, which are carried out after the completion of each module by the teachers delivering lectures in the discipline.

The evaluation of students' knowledge is made in accordance with the "Regulations on Score-Rating Knowledge Assessment System of KFU". This regulation states the contents, methodology and a unified approach to the score-rating assessment system and is used for academic process implementation. Due to this regulation, the efficiency and fairness of general and subject assessment of students at different stages and levels of training in all structural divisions of the university has been enhanced. The students' ranking in each discipline is 100 points taking into account the tests during the term and final tests (50 points) as well as the examinations (50 points).

Assessment criteria and evaluation tools are compiled in accordance with the "Regulation on the Stock of the Evaluation Tools for Current, Formative and Final Assessment of KFU Students". They are regularly elaborated on and are publicly accessible at the KFU website.

The ability to eliminate academic debts on the discipline is given to each student no more than two times for each module. Students are allowed to retake exams within the first four weeks of the next semester under supervision of the commission.

The State Examination Board and Appeal Board have been set up for the final attestation and appeal procedures. The State Attestation Board ensures a transparent and objective graduate assessment consisting of invited leading experts (50%) from organisations relevant to the SP. Chairperson of the board is a representative of employers or another educational institution. The State Examination Board is governed by the laws of the RF, relevant to the HE FSES in respect to the requirements for the state final attestation. If the Master's thesis and research work has been defended successfully by the student, the State Examination Board will evaluate it and will take the decision on awarding the Master's degree. The certificate of education (diploma) is issued within 10 days. The issues related to defence of qualification papers are regulated in accordance with the "Regulation on the State Final Attestation of Students of Autonomous Federal State Educational Institutions of HE at KFU".

Disabled students are trained in accord with the "Regulation on the Conditions for Training Disabled People at KFU". This regulation was adopted to provide the regulatory support to disabled students. Currently, there are no disabled students enrolled in the SP. Special conditions are created for students in difficult circumstances. Due to the student's group tutor, the information is quickly brought to the attention of the institute's administration, who care for compensation opportunities. For students with disabilities or a medical report, there are instructional adaptations and special measures can be taken for the assessment procedure. Students with impairment in hearing and speaking can take examinations in writing,students with impairment in movement can take oral distant examinations via videoconference and written examinations can be held within one day and outside the university. In case of illness or maternity leave of the student, the course examination may be postponed and students have the right to study according to an individual study plan taking into account their capacity to attend classes. On top of that, they are allowed to take tests during the intersessional period.

Students can get up to ten extra credits for participating in research activities, for special achievements in a field of study or for social and sport events which is a great source of motivation according to the statements of students and teachers likewise.

Assessment

The experts consider the examination procedure at KFU as well-thought out. Orders and regulations established assure a common operating procedure in terms of frequency and the evaluation system for the ongoing monitoring of the student's progress as well as the course examinations during the SP. The course examination of students is carried out in accordance with the curriculum. The assessment scope and requirements with regard to the intended learning outcomes are appropriate.

Evaluation criteria and assessment tools for the current and formative assessment are stated in the work programmes - except for practical classes and self-study deliverables. In the view of the experts, it is necessary to develop and include assessment criteria for students' practical classes and the evaluation of self-study deliverables. The university has in place assessment tools that allow to assess the acquired knowledge, skills and level of competencies. These assessment tools are continuously developed and approved by the university. Crucial Boards are existent, which leads experts to believing that objective and independent assessment of competencies is assured. However, the expert group considers the increase of the ongoing monitoring pass score up to 60 points, while decreasing the final assessment pass score down to 40 points in order to intensify the efficiency of students' class work.Moreover, the expert team calls for the urgent development to standardise the work programmes in the study courses. Every assessment unit (oral questioning, test, abstract) should be defined in the rating

system of evaluating students' academic progress. Besides, it is advisable to include the Master's thesis defence into the rating system.

All regulations as well as examinations criteria are transparent and open to the public on KFU's website. Students' examination schedules, individual performances and examination results are accessible within their individual online student account on short notice. Due to the electronic university information and analytical system, information is always up-to-date at the website of KFU and at the information stands of the institute. Since, however, the detailed work programmes are only partly available in the English language, the experts strongly advise to completely translate them into English.

As regards the bonus system for students, the experts advocate such an attractive incentive for students' increased effort and commitment but reiterate their conviction that extra credits should only be given for scientific and research work or the participation in scientific conferences and not for social activities or sport events.

Regulations for students in special circumstances as well as disabled students are documented in the self-evaluation report. Notwithstanding, in the view of the experts, opportunities for compensation, e.g. the possibility of individual study plans, should be made more visible at KFU.

Recommendations

R9 Assessment criteria for students' practical classes and the evaluation of self-study deliverables should be developed and added to the assessment criteria.

R10 The ongoing monitoring pass score should be increased up to 60 points, while decreasing the final assessment pass score down to 40 points in order to intensify the efficiency of students' class work.

R11 It is recommended to standardise the work programmes in the courses of the SP. Every assessment unit (oral questioning, test, abstract) should be defined in the rating system of evaluating students' academic progress.

R12 It is advisable to include the Master's thesis defence into the rating system.

R13 The work programmesshould be completely translated into English.

R14 The bonus system which allows students to earn up to ten extra credits should only be applied to scientific and research work and not to social activities or sport events.

R15 The visibility of compensation opportunities for students with disabilities should be increased.

4.4 Organisation of the Study Programme

Current situation

In order to be enrolled in the SP, applicants must have a degree corresponding to a 4-year educational programme of higher education or advanced qualification. If English is not the student's native language, a TOEFL or IELTS examination with a result not less than 87 points and for IELTS not less than 5.5 points, will be an additional prerequisite.

All applicants must pass an entrance examination prior to admission, which is supervised by the admission committee. Entrance tests are designed to determine the practical and theoretical knowledge of the applicants. The examination consists of two parts: one including logic, mathematics and natural sciences and the second part is an interview on the profile of the programme in English. This interview has an interdisciplinary character and includes questions on different subjects in the field of the SP.

Information on the admission regulations and entrance test are transparent on the admission committee's website.After successful completion of the entrance examination, the order of admission of the applicant is issued and displayed online.Personal data files are stored in the Department for the Students' Control.

Students can be transferred to another specialisation (faculty) on completion of the first term. Transfer from another university to KFU is also admissible. Transfer procedures are located at the website of KFU as well as information for foreign citizens applying for the SP. In compliance with the international obligations of Russia and the Russian legislation, all documents on education and (or) qualifications issued in foreign states to the persons willing to study or work in the RF, shall undergo the procedure of recognition.

Upon graduation, students are awarded the Russian State Diploma. If necessary, graduates can obtain the European official academic transcript to their diploma of higher education in English with the given study load in ECTS. The transcript contains adapted European states descriptions of academic courses and competencies acquired. This transcript is recognised by all participating countries of the Bologna process.

The head of the SP is responsible for controlling its contents, students' research activities as well as the teaching staff of the SP. The contents of some disciplines are decided upon by the teachers in accordance with the learning outcomes to be obtained. The timetable of classes and examination schedules are made up by the administration of the institute, namely the Deputy Director for Educational Activity.

The general supervision of students' groups in terms of attendance, performance, monitoring and living conditions, is performed by assistant lecturers of the Department of Geophysics and Geo-information Technologies. Social support of students is supervised by the Deputy Director for Social and Educational Activity, who is responsible for the allocation of scholarships, financial support and accommodation of students. The employment of students at REC TRIZ Simulation is supervised by the Deputy Director for Innovation Activities of the institute and research advisor of REC. All supervisors provide advice on all educational issues.

Students taking state-funding places are awarded with scholarships. In the first-year group, there are eight such students. Students who pay tuition fees can be reimbursed for food and travel costs. All students are employed at REC TRIZ Simulation and paid salary also for the purpose of financial support, which completely covers tuition fees. Two second-year foreign students study at the expense of KFU grant funds.

Beyond that, there is the Department for International Relations and its subdivision for foreign students' adaptation, which creates, introduces, implements and develops support services and enhances social, cultural, educational and psychological adaptation of foreign students. There is an expert at KFU, who is responsible for helping foreign students with visas, insurance, accommodation and social support. Employees of the Department of Psychological Services provide individual counselling, which is also provided over a helpline via telephone. Students' problems, academic, sport and creativity achievements are discussed at the university's web-portal and published in the weekly newspaper *Kazan University*.

KFU is partner to over 180 universities from 52 countries. Key Russian and foreign partners are public authorities, educational foundations of several countries and different companies. Within these partnerships, academic mobility is implemented, e.g. student and teacher exchanges, language and research internships and joint research projects.

Monitoring and analysis of changes in the labour market and comprehensive support in the graduates' employment is carried out at the university. Under the supervision of the Division for Practical Training and Employment of KFU as well as the Deputy Director of the Institute for Practical Training and Employers' Relations, there is efficient interaction with companies to be potential employers of graduates of the institute. Students have access to a constantly updated database of employers. Meetings of students and employers are regularly held, in particular meetings with the representatives of multinational companies Schlumberger, Halliburton, Weatherford and Russian Companies, such as PJSC Rosneft, OJSC Surgutneftegas, etc. In addition, while studying students are employed at REC TRIZ Simulation because one of the major educational tasks of SAU Econeft is attracting Master's degree students to carrying out research projects. After graduation, students have the opportunity to be further employed at REC TRIZ Simulation.

Besides, the institute cooperates with Russian and foreign research institutions.Currently, a joint programme with the French Petroleum Institute IFP School in Paris is being developed.

Assessment

Application procedures and admission rules are assessed as well-founded and the study process of the programme as well organised and balanced by the expert group. The organisation of the study process is adequate to achieve the intended learning outcomes. Students on site confirmed their satisfaction with their study situation and appreciate the support services and job opportunities within KFU and its cooperation partners. They mentioned the very close and easy contact with their lecturers and supervisors. Several services supporting the students' learning processes are offered including individual consultation hours for students. The expert panel values and encourages KFU to further pursue these variety of supporting activities and employment opportunities for students.

International students commended the socio-cultural environment at KFU. Many different international events are held at the IGPT with different companies and universities participating.Moreover, students are involved in the work of public organisations, sport and art clubs and academic student societies with great dedication.

In the experts' view, the university's economic model, which is supported by close partnerships with the industry and takes a variety of forms is well-considered. The majority of students are sponsored and funded by Russian and foreign companies. In addition, the number of students is adjusted in liaison with partner companies on the basis of recruitment opportunities. This strategy ensures that KFU remains in step with both industry requirements as well as their knowledge and expertise. The leading Russian and foreign companies are involved in the university's projects, which the experts underline as tremendously important and future-oriented.

According to the experts, students' opportunities to participate in mobility programmes, especially the joint programme with IPF, are important steps to connect with western universities.

Recommendations

R16 It is recommended to make the university environment user-friendly for people with motion and sight issues.

4.5 Resources

Current situation

The total number of staff members within the SP is sixteen, among them two professors, seven associate professors, two senior lecturers, four assistant lecturersand the head of the IGPT, who is also vice-rector for research.Elevenstaff members are working full-time and five are employed on a part-time basis. The share of full-time teachers is 70%. All sixteen staff members executing the SP and assessments have degrees in the corresponding profile of disciplines, thereof thirteen a doctoral degree. Aside, experience in teaching, research and production in the subjects taught are further prerequisites for competent personnel. At the same time, teachers are fluent in English and Russian. All of them are involved in methodological work (working on textbooks, e-learning resources, lecture materials, etc.), do research work and write scientific articles. Nine teachers are members of KFU's research laboratories staff.

The requirements for the SP's teaching staff are set forth in the HE FSES. Competition in teaching staff vacancies is announced and takes place in accordance with the "Regulation on the Competitive Selection of Candidates for the KFU's Teaching Staff Positions". This regulation states the order and conditions of the competition, the criteria for candidates' assessment and the term of holding positions of teaching staff at KFU as well as the procedure of structural division interactions to run competitive selection. The competitive selection is followed by conclusion of an employment contract for a period of five years.

Many teachers have a research background, come from European universities or have an industrial profile and are currently working in operating oil and gas companies. This mix endows KFU with a unique range of skills, from industrial know-how to highly specialized research. Over and above, the IGPT maintains close relations with leading Russian and foreign universities and international scientists. To meet the needs of the Russian society and labour market as well as European and international interests in the programme, teachers participate in international scientific conferences and are members in international organisations.

KFU has established a bonus system for academic staff publishing research results. As outlined in detail in the interview with academic staff members, most of them take part in international projects and publish scientific articles in Russian and international scientific journals regularly. Additionally, teachers receive invitations to give lectures at foreign universities or to go on internships. They also have the opportunity to improve their qualification through active participation in projects and work groups initiated by respective institutions at the regional, national and international level.

University teachers have to improve their skills at least once every three years in accordance with "Article 47 of the Federal Law of 29.12.2012, No. 273-FZ on Education in the RF". Further education courses are run at KFU and at the Further Education Faculty as well as in other training centres. There is the Centre for Advanced Training, Quality Management and Marketing of IGPT, which offers programmes for advanced professional training, retraining programmes for staff and employees as well as intern-

ships in the most advanced fields of geology and petroleum industry. Training courses and workshops offered at the institute correspond to the educational objectives for the academic year. Teachers continuously participate in internal and external trainings to acquire and further develop competencies, experiences and skills required for teaching and learning processes. Each teacher decides on the area for improvement. Internal trainings at KFU, which are organised by the special teacher XXI academic unit, allow teachers to share their experiences, present and analyse teaching and learning processes and methods.

Language teaching takes place at the Leo Tolstoy Institute of Philology and Intercultural Communication. Professors and doctors of pedagogical and philological sciences are involved in the implementation of the programmes using the latest tools of language training and preparing for international language certifications.

In order to implement interdisciplinary research and educational projects in field of oil production, refining and petro-chemistry and to attract the leading Russian and foreign scientists as well as young talented professionals, two new buildings were built in 2015 in addition to the facilities of the seven institutes of KFU. The IGPT with a total area of 818 square metres and the new building of the Alexander Butlerov Institute of Chemistry with a total area of 8,200 square metres consist of unique laboratories (the cost of purchased equipment is more than 500mln RUB) and classrooms that meet all international standards (the cost of equipment is 50mln RUB). Another important facility is the drilling of a parametric well on the campus territory, which significantly expands the educational potential and allows testing of new logging methods and study of carbonate reservoirs.

Most of the instruction takes place in the building of the IGPT. There are 47 classrooms seating 1,200 students equipped with modern multimedia equipment maintaining up-to-date level of classes. Moreover, there are computer classrooms with 162 modern computers and smart boards.

Within the programme students are working in the laboratories of KFU. Currently, the institute houses a 3D GEO Centre, a multipurpose reservoir modelling unit, which utilises software packages developed by leading global software producers, and over twenty R&D (Research and Development) laboratories with the state-of-the-art analytical equipment used in academic activities. Laboratory tutorials in geo-information technologies are held at Kazan-GIS-Studio furnished with 14 computers. Tutorials in simulation are held in the multifunctional Centre of Geological and Widescreen Installation Stereoscopic 3D Projectors equipped with 33 laptops, a video conferencing system and six high-performance workstations DepoRace G600 (Russia), commercial licenses for Petrel and Eclipse software (USA), and two 3D visualisation systems (AUVIX, Russia/the Netherlands) (39mln RUB).Laboratory tutorials in geochemistry in petroleum geology are held at the research laboratory of geochemistry of anthracdes equipped with modular system UltiMate 3000, gas chromatograph Clarus 500, chromatographmass spectrometer Thermo-Scientific-ISQ (Finnigan, USA), and elemental analyser 2400 Series II (US, PerkinElmer, USA). Laboratory tutorials in analysis of sedimentary basins, sedimentology and carbonate oil and gas lithology are taught at the lithological laboratory fully equipped with all necessary devices.

Furthermore, the in-situ combustion laboratory provides information about thermal EOR, NMR and petro-physical labs investigate core data. The Research and Education Centre TRIZ Simulation possesses a powerful research and production potential recognised not only in Russia but also abroad. The Centre is equipped with the hardware and software for creating geological and hydrodynamic models. The software systems are based on the latest scientific developments.

Being among the largest libraries in Russia, stocked with six million books, Nikolay Lobachevsky Scientific Library is very well equipped. The information on all publications is available in the conventional catalogues and more than one million entries are digitalised in the electronic catalogue. Remote order and electronic document delivery service facilitate the ordering process of articles from journals outside the library. The website of the library is connected with the integrated electronic catalogue of fifteen-major libraries of Kazan. The virtual enquiry service is available and virtual exhibitions and reviews can be viewed.KFU regularly acquires access to the electronic databases and resources of leading foreign and domestic publishers and aggregators (JSTOR collection, Elsevier electronic collection, Scopus abstracts database, etc.) and generates its own electronic collections. Textbooks and workbooks written by teachers of KFUare contained in the collection of teaching resources. The library accommodates work places for 800 students and 100 computer workplaces. The e-learning platform MOODLE is installed and Wifi access is available across the campus.

The library is accessible for readers with disabilities and library stuff guarantees special support for disabled students. Opening hours are from Monday to Friday 9 a.m. to 7 p.m. and on Saturdays from 9 a.m. to 5 p.m.

KFU offers modern comfortable housing for all non-resident students. The student campus is located in the Universiade Village built in Kazan to accommodate participants of the XXVII World Summer Universiade 2013. It is a residential micro-district with capacity of about 12,000 people. There is a medical centre, drugstore, sports equipment rent station, copy centre, laundry, beauty salon, cafeteria and other facilities available. The village project was awarded a diploma “For a special contribution to a socially significant infrastructure creation for youth and sport development” at the world contest FIABCI Prix D’Excellence.

The financial position of KFU is described in detail in the self-documentation and annexes. Financing the SP has been secured by a variety of sources: the federal budget funds, extra-budgetary funds of the institute including revenues from basic training, paid further training services as well as research activities. Apart from that, different companies render sponsorship support, which makes up a considerable part. The university is continuously working on an improvement of its fundraising strategy by strengthening links with local and international donors. Student tuition fees are still considered within the range of the market price within Russia.

KFU’s business plan is made up for the fiscal year(s) according to the approvement of the law on the federal budget taking into account the funds for these years. The budget report is prepared yearly according to the period of the academic year (September 1st to June 30th).

Assessment

During the site-visit, the expert team could explore the classrooms and laboratories of several departments as well as the library. Experts commend exceedingly well on resource endowments and the deployment to sustain student-centred teaching and core activities. They ascertain an excellent and up-to-date media equipment in each of the facilities, which provides extraordinary well conditions for a diversified and up-to-date education of the students.

Especially noteworthy are the professional tools and technical care, students and teachers equally benefit from. In the view of the experts, the institute indeed has the

best laboratory equipment from the X-Ray tomography and Neptune plus isotope analysis lab to the special multifunctional centre for geological and hydrodynamic modelling 3D GEO Centre. They are effectively developing modern methods of research and exploration of complex hydrocarbon reservoirs using the latest technology of reservoir stimulation. What is more, the software products from leading software developers are applied. The experts are impressed by the amount of excellent high-tech equipment of laboratories. With this equipment, the students get the best conditions to work comparatively and to experience international best practice examples.

Classrooms are pleasantly furnished and of adequate size to create a very good learning environment. The perfect work conditions have also been confirmed by the students. Beyond that, they emphasised that the dormitories are very comfortable, which has brought the experts to believe that lodging is no problem, due to the good supply of student housing by KFU.

As regards the library, the experts were convinced that all important standard literature and scientific literature on key topics of the SP are available. All students have access to the library and many publications are available in several languages, i.e. English and Russian. The expert group encourages KFU to continue the work on compiling electronic resources in English within the SP. Furthermore, access to major international databases is given. The numerous services of the library, from which both students and teachers benefit,is valued by the experts.

The teaching staff qualification fits the profile and goals of the programme. The number of teachers is totally sufficient and covers all areas and courses.Since KFU strives for fifteen students as maximum size for the SP, the student teacher ratio proportion is splendid. Strategies and processes for staff recruiting are in stock. The recruitment procedures are in line with international academic practices. Resources are exceedingly comprehensive to fulfil the mission of the institute.

The expert team assesses the qualification of the staff as highly adequate to offer a professional university-level SP and to provide the students with a qualified learning experience. The expert team appreciates the staffs' international teaching and professional experiences. Especially the bonus system for regular publishing of staff members is considered as a great asset because it motivates and strengthens their research interests and contributes to an increased relationship between research and teaching. On-site, experts were impressed by the extraordinary motivation and ambitions of teachers as well as the heads of the department, which provides an excellent basis for constant high-level developments.

The range of further trainings in didactics and relevant topics for staff members, which are regularly offered by the teacher XXI SAU is accentuated positively by the experts.

Financial management and funding is regarded as professional. They have developed good fund raising activities and pursue to increase them.Nevertheless, the experts stress the need to expand the involvement of sponsors to support the best master students (guaranteeing grants or personal scholarships and the involvement in joint study programmes at partner universities).

Financial resources are allocated to improve the laboratory and information base, to attract foreign students, to support students' research activities (e.g. publication of articles) and provide social support for students.

Recommendations

R17 KFU should continue the work on compiling electronic resources in English within the study programme.

R18 The involvement of sponsors to support the best master students (guaranteeing grants or personal scholarships and the involvement in joint study programmes at partner universities) should be expanded.

4.6 Quality Assurance

Current situation

As a stakeholder, the state is involved in the quality assurance procedures at the stage of creating the basic professional SPs and teaching materials elaborated at KFU based on the requirements of state standards and regulatory letters of the Ministry of Education and Science of the RF and the Federal Service for Supervision in Education and Science. Curricula are made and approved in strict accordance with the requirements set by the state. Moreover, the state is involved in the operation of the State Examination Board of KFU. Annually, at the end of the State Examination Board's work, the university submits the report on the results of the graduates' state attestation to the Ministry of Education and Science of the RF.

As stated in the self-evaluation report, the quality management system (QMS) at KFU has been developed according to the requirements and recommendations of the National Standard ISO 9001:2011[2] as well as ENQA standards and guidelines. It has been introduced in order to implement KFU's Development Programme for 2010-2019 aiming at the enhancement of KFU's competitiveness and quality management policies. The QMS is effectively applied to design, develop and implement training and research activities and to maintain and continually improve its effectiveness within KFU. Academic processes of monitoring, planning and optimisation are regularly documented and updated. Beyond, certification and surveillance audits of the current QMS with regard to designing, developing and implementing training services in the field of educational and scientific activities in compliance with GOST ISO 9001-2011[3] are constantly prepared.

The contents of the SP, requirements for its implementation as well as requirements to graduates' qualifications are governed by the relevant national standards. KFU's SPs are elaborated in accordance with the demands of the labour market and have passed the licensing examination and accreditation of the Federal Service for Supervision in the Sphere of Education and Science. Licensing and state accreditation give the university the right to conduct educational activities and to guarantee the required quality of training to consumers in accordance with national standards.

Annual internal and external audits systematically evaluate the effectiveness and efficiency of the QMS elements. These are key tools to monitor the progress of the SP's implementation as well as to examine the documentation of trainings (the SP's disciplines, teaching materials, etc.).Analytical and evaluation work includes anonymous

---

[2] The certificate ISO 9001 defines minimum requirements for quality management systems that must be implemented by the institution certified.

[3] In Russia, there are several types of technical standards: national standards (GOST R), interstate standards (GOST) and other standards (OST, TU, etc.). The national and interstate standards have designations GOST R (or GOST) plus a numeric designator, consisting of a serial number and a year the standard becomes effective. GOST is an acronym for "gosudarstvennyy standart", which means "state standard". At present, the collection of GOST standards includes over 20,000 titles used extensively in conformity assessment activities in 12 countries (https://runorm.com/gost-gost-r-standards, 04.04.2017).

computer surveys and internet-based testing, which are carried out regularly.In accordance with the Policy and Objectives of quality management, the Department of Education of KFU regularly analyses the degree of internal and external consumers' satisfaction with educational services. Procedures and quality assurance instruments include students' teacher evaluation as well as students' evaluation of the academic process, annual entry diagnostic internet-based testing of first-year students in order to assess the actual level of proficiency and skills of students admitted to the university and to analyse the degree of students' adaptation to training at KFU. For that purpose, the database Internet-based Trainer was purchased, which familiarizes KFU's teachers with the uniform structure of the course in accordance with the educational standards. Due to these instruments, analysis of statistical data allows KFU to identify and predict the dynamics of further training.

Apart from that, regular sociological surveys take place to identify the satisfaction of higher education customers (employers) and students with training at KFU. Annually, administration reviews, practical training reviews and surveys of graduates are scheduled. Statistical analyses to monitor the results with regard to dropout rates in the SP are foreseen. Since there are no graduates of the programme yet, such data is not available at the moment.

Mechanisms for closing quality feedback loops are established. Results are collected at the dean's office and directorates and reviewed at the meeting of the Academic Council of the institute. Based on the QMS's results, improvements are initiated, e.g. teaching materials are brought into line with national educational standards and the structure of some courses is revised. Teachers who have been given low scores in the surveys were sent to take further training courses. According to the results of internal audits and self-examination of the structural divisions, corrective and preventive measures are taken and their implementation is monitored on a regular basis.

Descriptions of internal communication processes can be found in the "Regulations on Subdivisions, Specifications of Processes, Documented Procedures and Instructions University's Standards", the quality manual and further organisational and administrative documents. Issues concerning quality assurance are discussed at a variety of meetings of various councils: at monthly meetings of the departments and the Academic and Methodological Commission of the institute, two times a year at the meetings of the Academic Council of the institute as well as at the annual scheduled and unscheduled meeting of the university staff and students.

The QMS provides an opportunity to track and analyse the indicators of adequacy of management of the university with regard to the SP's implementation.

Assessment

In the view of the experts, a systematic and methodologically sophisticated approach of quality management is visible. The experts certify thatKFUhas developed and implemented a comprehensive quality assurance concept of the SP which is interconnected to the quality assurance system of the institution. The QMS is of systematic character and effectively assures the quality of the SP.

The institute's quality assurance policy reflects the relationship between research and learning and teaching. It takes into account the national context in which the institution operates as well as the institutional context and its strategic approach. The policy translates into practice through a variety of internal quality assurance processes.

The self-evaluation report and the discussions during the site visit showed that data and developments are differentiated and self-criticallyanalysed. Each member of KFU is responsible to contribute to the quality of the SP according to his or her duties, competencies and commissions. Different stakeholders are involved in the quality assur-

ance processes andthe QMS also implies the involvement of students in the assurance of quality of training. On site, students told the expert group that they feel their concerns are taken seriously since they can see improvements. However, they are not informed about the results on different surveys,which is why the experts would like to provide thought-provoking impulses for makingsurvey outcomes accessible to students.

Mechanisms for closing quality feedback loops are established. The quality cycles are closed on all levels and work steadily and reliably. Teachers and committees reflect results of surveys and analyses, and measures are taken to improve quality. Changes in the labour market, expectations of employers and pupils are analysed on faculty and institute level.

The expert team was particularly impressed, how dedicated the representatives of the programmeare to the quality of the SP and its further development. They highlight the good integration of the employersinto the developmentand quality assurance of the programme as well as the orientation on the changing demands of the labour market. Obviously, quality management at KFU is an important approach to sustain the international competitiveness and innovativeness of the SP.

Recommendations

R19 Survey outcomes should become accessible to students.

5. Overall Assessment

The experts would like to express their appreciation for the open and respectful communication culture, the pleasant work environment and the significantly high commitment and dedication for continuous development and innovation of the university's rectorate, administration, programme representatives, teachers and students.

They are impressed by the solidity, attractiveness and sustainability of the programme's concept. The content and structure of the SP are coherent and convincing with a sound basis of scientific and pedagogical-didactic high quality.

KFU presented itself as a modern and dynamic university moving constantly forward. It provides a profound education on the level of European universities and prepares its students extremely well for future professions in their field of study. The laboratories boast up-to-date teaching facilities and special equipment with leading-edge tools, which is especially noteworthy. Besides, highly remarkable is the good cooperation between the academic staff and stakeholders involved in the SP. Well trained personnel make it possible to cover a wide-range of research activities. Particularly students' involvement in research and opportunities to work while studying are countenanced by the experts and students likewise. During the site visit, students commended on theclearly structured study process as well astheir satisfaction and great motivation for

personal engagement within their studies. A substantial contribution to this fact is made by the professional student support services of the university.

One of the major strengths of the programme is the focus on quality and internationalisation. In the opinion of the experts, the competitiveness of the SP with other local, national and international universities is quite noticeable. This generates a high motivation for the faculty and programme representatives leading them to create a distinctive profile of the institute. An atmosphere of continuous development and innovation was evident for the experts. The openness towards and the exchange with international universities in different countries and states offer a great opportunity for KFU and the Russian science, which is why the experts encourage the university to further pursue this approach in order to become even more attractive for international students and researchers from all over the world.

The experts agree that the SP complies with the European requirements and meets the evaluation criteria of the joint international accreditation of **evalag** and NCPA. Therefore, they recommend the programme for accreditation and for awarding the **evalag** label for international programme accreditation. In addition to that, they recommend that KFU considers and implements the recommendations in this report to further improve the programme.

The expert panel wishes the representatives of KFU all the best for the future development of the SP.

6. Statement of the University

Министерство образования и науки Российской Федерации
Федеральное государственное автономное образовательное
учреждение высшего образования
«КАЗАНСКИЙ (ПРИВОЛЖСКИЙ) ФЕДЕРАЛЬНЫЙ УНИВЕРСИТЕТ»
ОГРН 1021602841391
ИНСТИТУТ ГЕОЛОГИИ И НЕФТЕГАЗОВЫХ ТЕХНОЛОГИЙ
Кремлевская ул., д. 4/5, Казань, 420008
тел. (843) 2337161, факс (843) 2337561
email: geofak@kpfu.ru

16.05.2017г. № 1.1.3.03.1.01-19/17

На № _____ от _____

Statement of the University

The Insitute of Geology and Petroleum Technologies expresses its gratitude to the expert group for their expert report on the international accreditation of the study programme «Complex Data Analysis in Petroleum Geology», delivered by the Federal State Autonomous Institution of Higher Professional Education «Kazan (Volga Region)

7. Decision of the Accreditation Commission

The accreditation commission of NCPA and **evalag**accredited the Master's programme Complex Data Analysis of Petroleum Geology of the Kazan Federal University and awarded the **evalag** label for international programme accreditation. The accreditation is valid **from 27th June, 2017 until 29thJune, 2023**.

To further improve the programme the accreditation commission affirms the recommendations given by the expert team.

8. Recommendations (summarised)

Programme Profile

R1 The international dimension of the SP should be improved in terms of a greater involvement of European and northern American countries.

R2 It is recommended to enhance cooperation with other master programmes in Geology major.

Curriculum

R3 With regard to the interfaces all Master programmes offered at the institute have in common, joint courses should be offered and integrated into the curriculum.

R4 With permission to students entering the Master's programme upon Bachelor's degree graduation in another field of study, more field training modules should be included into the curriculum.

R5 Additional courses for students without educational geological background should be offered.

R6 KFU should allocate and ensure grants for students to enable them to attend international scientific conferences.

R7 The exact number of credits for the Master's thesis should be designated in the work plan of the SP.

R8 It is advisable to promote the study programme more actively in order to attract students from Europe, Asia and America.

Student Assessment

R9 Assessment criteria for students' practical classes and the evaluation of self-study deliverables should be developed and added to the assessment criteria.

R10 The ongoing monitoring pass score should be increased up to 60 points, while decreasing the final assessment pass score down to 40 points in order to intensify the efficiency of students' class work.

R11 It is recommended to standardise the work programmes in the courses of the SP. Every assessment unit (oral questioning, test, abstract) should be defined in the rating system of evaluating students' academic progress.

R12 It is advisable to include the Master's thesis defence into the rating system.

R13 The work programmes should be completely translated into English.

R14 The bonus system which allows students to earn up to ten extra credits should only be applied to scientific and research work and not to social activities or sport events.

R15 The visibility of compensation opportunities for students with disabilities should be increased.

Organisation of the study programme

R16 It is recommended to make the university environment user-friendly for people with motion and sight issues.

Resources

R17 KFU should continue the work on compiling electronic resources in English within the study programme.

R18 The involvement of sponsors to support the best master students (guaranteeing grants or personal scholarships and the involvement in joint study programmes at partner universities) should be expanded.

Quality Assurance

R19 Survey outcomes should become accessible to students.

9. Scale of Assessment Parametersand Evaluation Marks

Mark	Evaluation	Description
1	Unsatisfactory	The subfield under evaluation fails to ensure study quality on the basis of the criterion under considera-tion. It requires substantial correction; irregularities must be eliminated.
2	Satisfactory	The subfield under evaluation meets the require-ments and provides a sufficient quality of studies at basic academic standards. Improvements should/must be made and recommendations should be implemented.
3	Good	The subfield under evaluation has been well-defined and is systemically developed on the basis of the criterion under consideration. The core activities are provided at high academic standard and ensure good quality of studies.
4	Very good	The subfield under evaluation is perfectly defined and very well developed on the basis of the criterion un-der consideration. The core activities are pro-vided at very high academic standard and ensures an exceptionally good quality of studies.

No	Standards	Evaluation Marks given by the experts
1	Programme profile	4
2	Curriculum design	4
3	Student assessment	3
4	Organisation of the study programme	4
5	Resources	4
6	Quality assurance	4
	Total Maximum score: 24	23 very good

Annexes

Annex 1: Standards and Criteria of International Accreditation of Study Programmes and Questionnaire

Standard 1: Programme Profile

Criteria for assessment of a study programme	Issues for consideration
1.1 Correspondence of the objectives of the study programme to the profile and strategic goals of the HEI	What are the objectives of the study programme? What are qualification goals of the study programme and how do they fit to the HEI profile? How well are objectives and qualification goals of the study programme documented? How does the programme fit in the context of the other programmes provided by the faculty/teaching unit?
1.2 Definition of the intended learning outcomes of the programme and their accessibility	Are the intended learning outcomes of the programme well defined and publicly accessible?
1.3. Correspondence of the intended learning outcomes to the level of awarded qualification	Do the learning outcomes correspond to the type and level of qualification provided by the programme? How does the institution assure that the programme complies with internationally accepted standards?
1.4. Consideration of academic and professional requirements (standards), public needs and the demands of the labour market in the intended learning outcomes	How are learning outcomes based on the requirements of the Federal State Educational Standards, professional requirements (if applicable) to Bachelor, Master and Specialist Degree programme graduates; on public needs and the needs of the labour market? How do they contribute to the employability of the graduates? How is the analysis of changing labour market requirements conducted? What are the main employment possibilities of the graduates? How did the institution assess employment possibilities for the graduates? How do the expected learning outcomes contribute to the employability of the graduates?
1.5. Relation of the study programme to research (provision of scientific methods in theory and practice, research based teaching)	Is there an institutional policy related to research and research based teaching? Are the outcomes of research work used in teaching?
1.6. Compliance of the programme's profile with internationally accepted standards	Do the programmes profile and goals comply with internationally accepted standards?
1.7. The international dimension of the programme	Is there international dimension in the programme? What does it involve (student and stuff exchange programmes, foreign students, international component in the curriculum, etc.)?

1.8. Correspondence (adequacy) of the teaching staff's qualifications to the profile and objectives of the programme	Do the qualifications of the teaching staff, academic degrees and titles and/or work experience correspond to the profile and goals of the programme? Do the teaching staff cover all areas and disciplines of the study programme? Is the number of employed staff sufficient for the academic objectives? Are the teachers able to manage the necessary work load?

Standard 2: Curriculum

Criteria for assessment of a study programme	Issues for consideration
2.1 Structuring of the programme and ways of achieving intended learning outcomes	How do contents, structure, and teaching and learning methods meet the learning outcomes of the programme? How are they integrated in the study plan?
2.2 Mechanisms for providing knowledge in the corresponding discipline in the framework of the delivered programme. Application of scientific methods in the delivery of the programme	How does the programme provide the necessary knowledge and methodological expertise of the relevant discipline(s)? What are the main teaching and research methods used in the delivery of the programme? Why have these methods been chosen? How does the curriculum reflect the state of the art in the discipline?
2.3 Organisation of learning experience with the account of the diversity of students and their needs and appropriate student-centered teaching. Encouraging students to take an active role in creating the learning process	Is there a possibility of creating individual learning paths (if applicable)? At what point in the curriculum can students take choices (electives, tracks, etc.)? How are needs of a diverse student population (such as mature, part-time, employed and international students as well as students with disabilities and students in difficult life situations) taken into account?

Standard 3: Student Assessment

Criteria for assessment of a study programme	Issues for consideration
3.1 Organisation of assessment of intended learning outcomes	How is the assessment of intended learning outcomes organised? Is there an adequate system of student assessment? Is this system in line with the intended learning outcomes? Does the study programme participate in any kind of independent procedure of learning outcomes assessment? Does the study programme participate in this kind of procedures on a regular basis or occasionally?

3.2 The adequacy of the amount and requirements of assessments with regard to the intended learning outcomes	Are the amount and requirements of assessments adequate with regard to the intended learning outcomes?
3.3 The correspondence of the requirements of the thesis to the level of the degree	Do the requirements of the thesis reflect the level of the degree? What kind of thesis and final examinations are necessary? What kind of topics are covered by the thesis? How do teaching staff supervise the thesis?
3.4 Transparency and consistency of assessment criteria	What are the assessment criteria and are they transparent and used consistently? Are the documents regulating assessment procedures of knowledge/competencies of students published? Is this information accessible?
3.5 Adequacy of the qualifications of the staff undertaking assessments	Are the teachers undertaking assessment adequately qualified?
3.6 Availability of examination regulations	How is the examination procedure regulated? What different types of examinations are used? How many examinations exist within one module, within one semester, within the entire programme? Are students informed about assessment procedures, examinations, tests and other types of control? How do examination results contribute to the final degree? Is there an affective appeals system? How are students' complaints addressed? How does the examination system assess the intended learning outcomes of the study programme and the modules?
3.7 Availability of clear and objective regulations for student absence, illness and other mitigating circumstances	What kind of regulations for student absence, illness and other mitigating circumstances exist in the examination regulations? Are these regulations transparent and accessible to students? How are needs of part-time, employed students, etc. taken into account?

Standard 4: Organisation of the Study Programme

Criteria for assessment of a study programme	Issues for consideration
4.1 Appropriateness of entry qualifications	What are the entry qualifications of the programme? How are these qualifications defined and how are they connected to the learning outcomes? How is the selection/admission process organised? How is it documented? Where are admission rules and rules for transfer of students from other educational institutions published?

4.2 Regulations for the recognition of qualifications (i.e. Lisbon Convention)	What are the regulations for the recognition of prior learning? How is it documented and where are these documents published? Are graduates issued a Diploma Supplement? Does the programme cooperate with other educational institutions and national recognition centres with a view to ensuring coherent recognition of qualifications across the country?
4.3 Organisation of the study process and achievement of intended learning outcomes. Consideration of the diversity of students and their needs	How is the study process organised (types of classes, group sizes, relation between classes, homework, self-learningtime, etc.)? Does the organisation of the study process allow the programme to be carried out in such a way that the intended learning outcomes will be achieved? Does the organisation of the study process also take the diversity of students and their needs into account? How does the programme take into account the needs of disabled students, as well as students in difficult life situations (students that have children, migrants, international students); students with different abilities; students with different level of academic achievements?
4.4 Management of the study programme (roles and responsibilities)	How is the programme management organised? Who has which responsibilities in the management of the programme?
4.5 Adequacy of the workload of the programme with respect to the necessity to reach the intended learning outcomes in the scheduled time frame	What is the student workload of the programme? How is the workload distributed across semesters and within one semester? How does the institution assure that the workload is manageable for the students? Is the workload of the programme adequate with respect to the necessity to reach the intended learning outcomes in the scheduled time frame?
4.6 Organisation of the student life cycle (i.e. all (organisational) relationships between the student and the institution from enrolment to graduation)	How is the student life cycle organised (from enrollment to graduation)?
4.7 Student support system (care services and student advisory services)	What student care services and student advisory services does the institution provide on the institutional and on the programme level? How effectively are these services organised? Is there a regular monitoring of student opinion on the issues of conditions and organisation of the study process, student support and advisory services? How is student academic mobility supported?
4.8 Cooperation with internal and external partners	Does the programme cooperate with other internal and external partners? Which parts of the programme are provided by partners? How does the programme assure that the partners provide their services at high quality?

Standard 5: Resources

Criteria for assessment of a study programme	Issues for consideration
5.1 Sustainability of funding and financial management	What financial resources does the programme dispose of? Which are the funding sources (tuition fees, university funding, direct government funding, third party funding, etc.)? How does the institution assure the financial sustainability of the programme? How does the programme deploy its resources to reach the programme's objectives? Are the financial resources sufficient to provide quality delivery of the programme? Is there a long term plan for financing the educational institution?
5.2 Adequacy of the number and qualification of academic staff (full-time and part-time) to ensure intended learning outcomes	Is the number and qualifications of the academic staff (full-time and part-time) adequate to ensure intended learning outcomes? What is the ratio between full time and part time academic staff? Are the teachers involved in research? Do they carry out methodological work? Do they participate in conferences and exhibitions?
5.3 Availability of strategies and processes for the staff recruiting and staff development	What are the strategies and processes for (full time) staff recruiting? How does the in-stitution recruit part time staff? Which possibilities for staff development (especially development in teaching and learning methodologies) does the institution provide? How does the teaching staff use these possibilities?
5.4 Availability, sufficiency and quality of facilities and equipment for the provision of the programme (library, laboratories, teaching rooms, IT equipment)	Do the amount and quality of facilities and equipment allow the provision of the programme (library, laboratories, teaching rooms, IT equipment)? Does the provision with material and technical recourses allow the study programme to be delivered in accordance with the requirements of the curriculum? Are there enough computers and other technical equipment? Are up-to-date methods and teaching aids used in the study process (information resources and data bases, to include electronic multi media resources)? What resources does the library provide for the programme? How accessible is the library? Are learning and teaching materials accessible for students' independent work?
5.5 Sufficiency and quality of the resources provided to reach the objectives of the programme	Are the amount and quality of the resources provided adequate to reach the objectives of the programme? How does the programme deploy its resources (financial and non-financial) to reach the programme objectives?

Standard 6:Quality Assurance

Criteria for assessment of a study programme	Issues for consideration
6.1 Design, approval and implementation of the programme; monitoring procedures	How does the institution develop, approve and implement the study programme? What are the mechanisms for its reviewing and improving? How is information on the management of the programme collected and analysed? What data does the programme collect and how are these data used for quality enhancement? - profile of the student population; - student progression, success and drop-out rates; - students' satisfaction with their programmes; - learning resources and student support available; - employability and career paths of graduates; - satisfaction of the staff with the work conditions, resources, etc. What are the procedures for reviewing and updating the curriculum with the account of the latest achievements of science and technology? How often is the programme reviewed?
6.2 Availability of a quality assurance concept of the programme and how it is connected to the quality assurance system of the institution	What is the quality concept of the programme and how is it connected to the quality assurance system of the institution?
6.3 Quality assurance processes and instruments of the programme	What are the quality assurance processes and instruments of the programme?
6.4 Effectiveness, regularity and systematic character of the quality assurance system	Does the programme use quality assurance regularly and systematically for quality enhancement? What are the objectives for the programme in quality assurance how does the institution monitor the achievement of the objectives
6.5 Availability of mechanisms for closing quality feedback loops	Are there effective mechanisms for rectifying shortcomings identified by the inner quality assurance system? How does the programme demonstrate that quality feedback loops are closed? How effective are they?
6.6 Collecting, analysis and use of data by the persons responsible for implementing the programme	How are the responsibilities for quality assurance distributed among programme staff and between levels (institution, faculty, programme)? How systematically and effectively do the persons responsible for the programme collect, analyse and use relevant information How have the results of quality assurance monitoring and periodic review contributed to the enhancement of the programme?

6.7 Involvement of stakeholders (students, teachers, administration, external experts, alumni, employers) in quality assurance	How does the institution involve stakeholders (students, teachers, administration, external experts, alumni, employers) in quality assurance?
6.8 Availability of procedures and relevant information for informing current and prospective students about the programme	Is the information about the study programme accessible to all stakeholders (applicants and their parents, students, teachers, employers, etc.)? How regularly does the programme monitor and update the published information? Is the information published on the website complete and accurate? Such as: - curriculum, - admission requirements, - intended learning outcomes, - awarded qualifications, - teaching and learning methods, assessment procedures, - academic progression, - research programmes and achievements

Annex 2: Requirements for experts

The expert panel will consist of four members who are unbiased. The majority of the panel members will have substantial expertise in the management of higher education institutions. Experience with international higher education systems is also a necessary requirement. Two experts will be from higher education institutions with leadership experience. One student will also be member of the panel. Upon request of the university, the size of the expert panel may be increased.

In order to make unbiased assessments, peer reviewers need to be, and need to be seen to be, free from conflicts of interest. This requires all professional and private relations with the evaluated institution to be disclosed in order to remove any doubts about the reviewer's assessment of the institution. Possible conflicts of interest are:

- employment as professor, teacher, researcher or guest scholar at KFU within the last five years;
- doctoral or post-doctoral studies at KFU within the last five years;
- family ties, personal connections or conflicts with staff members at KFU;
- current common research or other intensive contacts with KFU;
- direct academic competition with reviewers own projects;
- student/teacher relationship with staff members at KFU dating back less than five years;
- professional dependency within the last three years;
- participation in mutual review procedures within the last five years[4];

[4] Participation in mutual review procedures does not necessarily lead to a conflict of interest. This needs to be checked on a case to case basis.

- current application procedures or appointment negotiations with KFU;
- membership in commissions, councils or boards of KFU;
- individual or common economic interests.

Annex 3: Site visit schedule

Time	Event	Participants	Venue
13th March 2017			
During the day	Arrival of expert teams at Kazan Airport		
12.00 — 15.00	Excursion around the city (for foreign experts)		
15.30	Lunch (for foreign experts)		Café, Hayal Hotel
17.00 — 18.30	**Internal preparatory meeting of expert team-sTraining**		Conference hall, Hayal Hotel, Universitetskaya st. 16
20.00	Dinner (for foreign experts)		Café, Hayal Hotel
14th March 2017			
08.40	Transfer to the University/ Meeting in the hotel lobby		
08.45	Arrival at Kazan Federal University		Kremlyovskaya st. 18
09.00 — 11.00	**Internal preparatory meeting of expert teams**	Expert teams	Room 336
11.00 — 12.00	**Meeting of expert teams with the University Administration**	Vice-rectors, Heads of structural subdivisions, directors of centers and institutes, Director of department of IGaPT, Deputy Director for Education, Expert	Room 335
12.10 — 12.30	**Visiting library**	Expert teams	
12.30 — 14.00	Lunch		Café, Hayal Hotel
14.00 — 14.10	Transfer to Geology building. Address: Kremlevskaya st. 4/5		

Time	Event	Participants	Venue
14.15 — 15.15	**Meeting with University/faculty leadership**	Director of the Institute, Deputy Director for Marketing, Deputy director for Innovation, Deputy Director for Social work, Expert team	Room 200
15.15 — 15.30	Coffee-break		Room 201
15.30 — 16.30	**Meeting with programme management**	Head of the Department of Geophysics and Geoinformation technologies, Programme Manager, Deputy Director for Education, Expert team	Room 200
16.30 — 17.00	Review of exams and theses	Expert team	Room 201
17.00 — 18.00	Tour of campus and facilities	Expert team	Room 608
18.00 — 18.15	Internal meeting of expert team	Expert team	Room 201
20.00	Dinner at the hotel (for the external experts)		
15th March 2017			
08.30	Transfer to the University. Meeting in the hotel lobby		
09.00	Arrival at Kazan University		Kremlyovskaya st., 4/5
09.00 — 09.15	**Internal meeting of expert team**		Room 201
09.15 — 10.15	**Meeting with students**		Room 200
10.15 — 10.30	Coffee break	Expert team	Room 201
10.30 — 12.00	**Meeting with the teaching staff**	Teaching staff, Expert team	Room 200
12.00 — 12.30	Additional meeting on request	Expert team	Room 200

Time	Event	Participants	Venue
12.30 — 12.45	Transfer		
12.45 — 14.00	Lunch		Café,Hayal Hotel, Universitetskaya st. 16
14.00 — 14.10	Transfer to the main building (Address: Kremlyovskaya st. 18)		
14.10 — 16.00	**Internal meeting of expert team. Filling out the assessment forms**	Expert teams	Room 336
16.00 — 17.00	**Feedback to programme management. Final meeting of Expert teams with Kazan University representatives**	Representatives of the University, Expert teams	Room 335
17.00 — 17.30	Free communication with experts		
20.00	Dinner at the hotel (for the external experts)		

Annex 4: Profiles of expert panel members

Dr. Galina Kuznetsova (Russia)

Galina Kuznetsova holds the review chair of the expert group at hand. She finished her studies with a PhD in Geological and Mineralogical Sciences and is now Associate Professor in the Department of Petroleum Field Geology in the Faculty of Petroleum Geology and Geophysics at Gubkin Russian State University of Oil and Gas (National Research University).

Prof. Dr. Joachim Rohn (Germany)

Joachim Rohn functions is deputy review chair of the expert group at hand. Since 2006, he is Professor for Applied Geology at the University of Nuremberg-Erlangen in Erlangen, Germany. After graduation in Geology at Karlsruhe Technical University (KIT), he received his PhD in 1991. He has worked as a geologic expert for several consulting companies and geology researcher at the Technical Universities of Karlsruhe and Darmstadt. The focus of his academic interests and publications lies in the area of mass movements (e.g. the wake of earthquakes or landslides) and in the stability of different forms of ground.

Dr. Ludwig Stroink (Germany)

Since 2010, Ludwig Stroink is Scientific Director and head of the “International Affairs Office” at the German Research Centre for Geosciences in Potsdam, Germany. He studied Geology at Aachen Technical University and received his PhD in Geology in 1993. During that time, he also extended his studies to include the fields of waste management, recycling and water preservation. Afterwards, he worked in several research projects of the German Research Foundation, the Federal Ministry of Education and Research and the EU. He has longstanding experience as member of various scientific boards, among them the Advisory Board “SpringerBriefs in Earth Sciences”, the “International Geoscience Education Organisation” as well as the Climate KIC General Assembly. Moreover, he works as advisor for the Research Council of the Sultanate Oman.

Ivan Pasechny (Russia)

Ivan Pasechny is a 1st year Master student at the Institute of Automated Control Systems and Information Technologies, Faculty of Control and Automation, at Kazan National Research Technological University.