REPORT

on the results of the independent assessment of the basic professional educational program of higher education

130101 Applied Geology

Profile: 130101.1 "Geological mapping, prospecting and exploration of solid mineral resources"

Federal State Autonomous Educational Institution of Higher Professional Education the North-East Federal University (NEFU) named after M.K. Ammosov

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Summary of the program: Training of engineers and geologists in the Yakutsk State University (now NEFU) started in 1956. Since 2000, mining engineers are trained according to the SES HPE No. 3 tech / ds (03.03.2000), direction: 650100 “Applied Geology”.

Since 2011, mining engineers are trained according to the educational standard FSES HPE No. 62 (17.01.2011), direction: 130101 “Applied Geology”, specialization: 130101.1 “Geological survey, prospecting and exploration of solid mineral resources”, awarded qualification “Specialist”, the program is implemented by the Departments: of prospecting and exploration of mineral resources deposits, of regional geology and geoinformatics. Location of the implementation of the program: Geological Faculty of the NEFU (677000, Yakutsk, TFB, 50 Kulakovskogo Str.), period of training: 5 years, form of training: full-time.

CRITERION 1. EDUCATIONAL GOALS OF THE PROGRAM

Goal of the program – development of students’ personal characteristics, formation of general cultural and professional competences in accordance with the FSES HPE with the direction 130101 – Applied Geology. It is agreed with the decision of the Government of the Republic of Sakha (Yakutia) on the forecast of social and economic development of the Republic of Sakha (Yakutia) in 2013-2017 in terms of development of mineral resources.

The GEP is agreed with the State Committee of the Republic of Sakha (Yakutia) on Geology and Mineral Resources. Students are trained by the state order of the Republic of Sakha (Yakutia).

Goals and objectives of the program are fully consistent with the goals and objectives of the professional activity defined by the FSES with the direction “Applied Geology”, specialty “Geological survey, prospecting and exploration of solid mineral resources”.

In addition, the goal of the program complies with the practice of the SEE HPE Russian State Geological Prospecting University named after S. Ordzhonikidze, which – according to the opinion of the program developers is the most successful practice of the implementation of the program.

Students, lecturers and staff of the departments are acquainted with the stated objectives of the program at the faculty meetings, gatherings and supervisory hours. Abstract of the GEP is put online on the NEFU site: http://s-vfu.ru, copies of the GEP are available at the departments.

Monitoring of compliance of the goals of the program with students’ educational needs bears regular character. Comprehensive studies (survey of students) are conducted; they include issues of compliance of satisfaction with the goals of the program with students’ educational needs (information report on the results of the survey of the NEFU students and employers, results of the social survey “Freshman-2012”, “NEFU Graduate-2012”).

CRITERION 2. STRUCTURE AND CONTENT OF THE PROGRAM

Working curriculum (WC) of the profile of training “Geological survey, prospecting and exploration of solid mineral resources” is compiled by the software “HPE Plans” and is approved by the Academic Council of the University. Working curriculum includes a title page, schedule and plan of the educational process.

Working curriculum provides disciplines of national and regional (university) component and disciplines by student’s choice, such as History of Yakutia and the North-East of Russia, People and Culture of the Circumpolar World, Permafrost Study, Regional Economy of the North-East of Russia, etc.
Final state certification of graduate students includes defense of the final qualifying paper and state examination (Appendix 11, Program IGA).

Tickets for state examination for the profile of training “Geological survey, prospecting and exploration of solid mineral resources” (Direction of training: 130101 “Applied Geology”) contain questions related to modern development of the science (Annex 11, Program IGA). Tickets for state examination contain questions on geotectonics related to modern geological concept “Plates Tectonics”. For example, the question of “hot spots” and plumes.

Theme of the FQP is defined by both requests of production organizations and problems of research tasks solved by the departments’ lecturers. For example, a special question of the diploma project of Samsonova L. B. “Lithological and geochemical features of Upper Triassic deposits of the Norian stage” is performed in the framework of the project by the State order of the Republic of Sakha (Yakutia).

CRITERION 3. TRAINING MATERIALS

DTCs and DWP s are developed for all disciplines of the curriculum at a single structure, which includes: results and conclusions by topics (modules) of the disciplines, including in the form of test questions, tasks and activities (Annex 5, DWP).

Test questions, tasks and test materials are given in the DTC diagnostic unit and in the DWP section “Evaluation materials for current, intermediate and final control of progress in the discipline”. All DTCs of the disciplines include distribution to students’ classroom and self-study.

The set of training materials (TMs) used in the framework of the program forms a single complex, aimed at achieving results of education by students, both in the framework of individual disciplines and the overall program.

The necessary textbooks and manuals from the main list of literature, given in the WC of the disciplines, are available in the library of the Technical Faculties Building (TFB).

All students of the Geological Faculty have access to the library of the Technical Faculties Building (TFB) and to the computer labs of the Geology Faculty with access to the Internet, where they can use the electronic library at: http://libr.s-vfu.ru.

Materials for laboratory practical sessions, practical classes and information databases provided by the training courses are available to students in the local server of the faculty and in the system of distance education: http://moodle.ysu.ru/.

All DWP s and DTCs are examined and approved by the Training Council of the NEFU. The TC includes representatives of all the educational units of the University. Chairman of the trade union of students (or members of the trade union of students) participates in the meetings of the training committee and the academic council of the faculty, leaders of the academic groups are invited to faculty meetings, where issues related to the TMs development and updating are discussed.

CRITERION 4. TECHNOLOGIES AND METHODOLOGIES OF THE EDUCATIONAL ACTIVITY

Implementation of the educational program is based on various modern educational technologies (projects method, contextual method of education, modeling of production situations, research method, use of interdisciplinary connections, use of ICT, seminars, conferences, problem-based instructions, self-study, defense of papers, individual work, creative
assignments, reports, messages, testing, etc.), i.e. the technology of integrated education is used, allowing achievement of the expected results of education.

Internal standards of the university of the main types of work used in the implementation of all forms of education should be attributed to the group of acceptable ones.

New educational platform “RSK Universum” is introduced in the NEFU; it will provide access to educational resources and new educational services to all the participants of the educational process. The project “Single information service space” (SISS), aimed at improving the quality and effectiveness of teaching students, is implemented by the federal university with major Russian IT-integrators: the company “Inline Group” and the group of RSK companies, with the active support of the Intel Corporation, which jointly developed a common concept of educational solution for the NEFU based on cloud computing.

Work of students’ scientific circles is organized, competitions and contests among students are held, including with the use of computer tests. All this allows organization of individual paths of students’ teaching.

CRITERION 5. FACULTY STAFF

Implementation of the GEP involves 51 lecturers, of which 30 candidates of sciences, 5 doctors of sciences, 16 associate professors, 7 professors.

Qualification of the faculty staff complies with the objectives of the program and is sufficient for teaching students. Details of the FS are shown in Appendix 12 “List of lecturers implementing the GEP”. Analysis of needs in lecturers is performed at the faculty level, as well as with the annual adjustment of the working curriculum in order to implement disciplines relevant to contemporary needs of mining and geology industry into the variable part of the GEP.

Regulations on the procedure of planning and accounting of work of the faculty staff in the first half of the working day.

Regulations on the procedure of planning and accounting of work of the faculty staff of the university (second half of the day).

Lecturers implementing the GEP individually determine the path of integration in their work of various spheres of their activities, combining educational and research activities. Implementation of research projects in 2013 involves 40% of lecturers implementing the GEP. Students are engaged in scientific circles, participate in research projects, work individually with lecturers. Since 2010, the Department of MRD P&E organizes educational, research and production expeditions.

A number of disciplines of the scientific and natural and professional cycle include the results of own research or the materials collected by the lecturer while performing research work. Example: Polufuntikova L. I., candidate of geological and mineralogical sciences. Results of studies of microstructures of gold deposits in Eastern Yakutia is used for implementing the course “Laboratory methods of studying mineral raw materials”.

In the preparation of abstracts, case assignments, course and diploma projects the student is required to use information presented in scientific and technical journals.

Lecturers have practical experience in the subject area of the educational course content:

1. Research activities of lecturers comply with the subject field of the course content.

Example: Fridovskiy V. Yu. Field of scientific interests – Conditions of formation and structural control of orogenic deposits, discipline “Structures of ore fields”; Shepeleva Ya. P. Field of scientific interests – Early Jurassic volcanism, disciplines “Petrography”, “Lithology”.

2. A number of lecturers have experience of work in mining and geological enterprises and research organizations.
Example: Rozhin S. S., IGDNM of the SD of the RAS. Laboratory of geodynamics, implements the course “Tectonics and geodynamics”; Pulyaev N. A., ICC of the PSE “Yakutskgeologiya”, head of the unit DPAS-Geochemistry, implements courses “Mathematical methods in geology”, “Analysis and interpretation of geochemical data”.

Training of specialists with the specialty “Geological survey, prospecting and exploration of mineral resources deposits” in the Republic and in the North-East of Russia is performed only at the Geological Faculty of the NEFU.

Lecturers’ research activities are aimed at studying conditions of formation of deposits of strategically important mineral and raw resources of the North-East of Russia, their regional and local forecast which helps enrich the content of disciplines of the professional cycle.

Lecturers ensuring implementation of the GEP actively apply elements of multimedia technologies in education: they create multimedia courses, use audio and video materials at their lectures.

At the level of university personnel reserve is approved. Department staff is both operative and perspective reserve of the NEFU.

Post-graduate students enrolled in the specialty 25.00.11 “Geology, prospecting and exploration of mineral resources, minerageny”, according to the curriculum, attend elective classes in psychology and pedagogy. As professors’ and senior lecturers’ assistants (third- and fourth-year post-graduate students), they implement training courses. Now there are three post-graduate students and one applicant.

Young teachers attend public lectures of lecturers with high competence and qualification, hold seminars on drawing out disciplines curricula and training complexes.

**CRITERION 6. RESEARCH ACTIVITIES AND IMPLEMENTATION OF THEIR RESULTS IN THE EDUCATIONAL PROCESS**

On the basis of the training department works a research center “Mineral and raw resources and technology of their evaluation”, which is based on the scientific school “Minerageny of the North-East of Russia”, the head – doctor of geological and mineralogical sciences, professor, director of the department, Fridovskiy V. Yu. In the framework of the SIA SEC projects are implemented by the State orders, program, etc. The list of projects for 2009-2013 is attached (Criterion 6. Appendix 1).

SIA results include recommendations for regional and local forecasting of perspective territories.

Example: project 1.1.4 by the State order of the Republic of Sakha (Yakutia): “Scientific grounds of the prospects for gold mineralization of the investment attractive objects of the western part of the Olchano-Nerskaya minerogenic zone”.

SIA results are published in journals of the HAC, DB of the RISC (Criterion 6. Appendix 2) and in the materials of national and international scientific events. SIA results are reflected in theses of the SPR departments (Criterion 6. Appendix 3).

The SPR departments are involved in the implementation of the Program on the NEFU development for 2010-2019 in the framework of the project 1.1. “Development of new technologies of exploration and evaluation of strategically important mineral and raw resources of the North-East of Russia and ensuring competitiveness by the specialists of geological and prospecting industry”. In the framework of the project works a temporary creative team, the direction of activity of which is the study of the conditions of formation, minerageny and forecasting of deposits of strategically important mineral and raw resources, development and preparation for the commercialization of innovative technologies for their research.
The results obtained by the post-graduate students in the course of preparation of the qualification paper are used to update disciplines of the professional cycle. Example: Results of the analysis of the ore-forming fluid inclusions of gold-quartz deposits of Tarynskiy ore and placer site performed by the post-graduate student Ryzhkovich E. V. are presented in the lecturing material for the discipline “Laboratory methods of ore exploration”, section “Thermobarogeochemistry”.

Lecturers participate in scientific conferences in the country and abroad as invited (plenary) speakers (Fridovskiy V. Yu. All-Russian scientific-practical conference “Geology and mineral and raw resources of the North-East of Russia”, 2012. Fridovskiy V. Yu. Round table on the results of implementation in 2012 of the Presidential Program of training engineers for 2012-2014 at the invitation of the organizing committee, spoke in the Ministry of Education and Science of the Russian Federation with the report “On the experience of implementation of the Presidential Program to improve qualification of engineers and technicians in the NEFU”).

The result of students’ research activities are speeches at scientific meetings and publications:

Since 2010, the collection of students’ scientific papers “Geology and Mineral Resources of Yakutia” is published.

**CRITERION 7. EDUCATIONAL AND MATERIAL AND TECHNICAL RESOURCES OF THE PROGRAM**

Types and amounts of educational, financial, and material and technical resources used to implement the program are determined by the internal regulations of the NEFU.

Processes of formation and use of educational and financial resources aimed at the implementation of the program are clear to all the participants of the educational process. Report on the economic and financial activities of the NEFU is published on the website of the University: http://s-vfu.ru.

Allocated financial resources allow acquisition, maintenance and operation of the material and technical base and the equipment necessary to implement the program.

The departments providing implementation of the GEP have 4 rooms for lectures, 1 computer room with 20 seats, 1 training and 2 training and research laboratories with modern hardware and software systems.

Information support of the program is enough for students’ achievement of the intended results of education: DTCs are developed and modernized, guidelines and manuals are published, databases are created, advanced software operates.

Training laboratories are equipped with all the necessary equipment and consumables to a sufficient degree.

Students’ production practice takes place in the mining and geological enterprises: PSE “Yakutskgeologiya”, JSC “ALROSA”, LLC “Anabar Diamonds”.

On the base of the NEFU there is a Center of collective use “Arctic Innovation Center” (AIC). E-learning resources are available on the local server of the faculty, in the system of distance education: http://moodle.ysu.ru/, in the electronic library of the NEFU (http://libr.s-vfu.ru/).

To ensure students’ self-study, the following resources are used: NEFU library, open information resources, libraries of the departments.
CRITERION 8. STRUCTURE OF THE PROGRAM MANAGEMENT

The NEFU has developed and acting regulatory documents (standards, regulations, instructions, provisions, staff list, job descriptions, etc.), which regulate planning, organization and management of the process of implementation and development of the program.

Distribution of functions between the departments and other units of the faculty and the UDs provides organization of the profile teaching of disciplines of all cycles.

Monitoring of compliance of the lecturers’ activities with the standards and regulations approved by the NEFU is conducted through inspections of training management, quality control and surveys of staff and students.

As part of its duties, the training division of the Training Department (TD) provides control of organization of the educational process in the NEFU, including the following planned activities:

- Check of availability of the room fund for the school year (once per year);
- Check of the schedule of training sessions for the compliance with the WC (twice per year);
- Check of training sessions for the compliance with the approved schedule (monthly);
- Scheduling and distribution of university-wide stream rooms (twice per year);
- Data collection for the laboratory fund;
- Check of the schedule of examination sessions for the compliance with the WC and the regulations for examinations;
- Check of the organization of examination sessions for the compliance with the schedule and availability of the documentation that accompanies the process of passing an exam;
- Check of organization of the procedure of passing state exams and defenses.

There is a developed system of motivation of pedagogical activity: rating awards “Criteria of the results of the staff work for a certain period of time”, competitions of the Training Department, such as TS competition 2012 “Best training session with the use of active and interactive forms of education”.

The system of internal monitoring of quality includes several activities: after each TD session, a detailed analysis of its results is performed across the university according to the data of each department, for example, “Analysis of the results of the summer session of 2011-2012 academic year of full-time students”; scheduled inspections of residual knowledge (on the disciplines of the previous term); cross-checks of residual knowledge. In 2013, tests on the disciplines “Mathematics” and “Physics” are performed in the system: http://moodle.ysu.ru/ of the second- and third-year students of the ITI, TI, GEF, GF training units, visiting and monitoring of open classes, monitoring of the quality of EERs and TM in the system: http://moodle.ysu.ru/.

Annual conferences of freshmen and graduate students are held, during the period of preparation for which theme surveys are organized. Example: 2012, “Survey of students on the application of the PCS”. To improve results of education and to enhance the level of guarantees of education quality, expanded meetings of the departments’ and faculty staff are held, including invitation of representatives of the units engaged in the organization and support of the educational process (of the TD of the NEFU, Career Center of the NEFU, quality management).
CRITERION 9. EMPLOYERS’ PARTICIPATION IN THE IMPLEMENTATION OF THE PROGRAM

Policy of the EE encourages employers’ participation in the implementation of the program. Employers conduct consulting work at the development. The content fully takes into account opinions and wishes of the employer of the GEP. Actualization – annual adjustment in negotiating with employers (protocols). Representatives of the employer, involved in teaching disciplines: Legal basis of subsoils use (Kovalev L. N., chairman of the State Committee of the Republic of Sakha (Yakutia) on geology and subsoils use), Crystallography and Mineralogy (Kolodeznikov I. I., doctor of geological and mineralogical sciences, professor, President of the Academy of Sciences of the Republic of Sakha (Yakutia), Geological Mapping (Kutygin R. V., candidate of geological and mineralogical sciences, senior research engineer of the Laboratory of Paleontology and Stratigraphy of the IGDNM), Formation Analysis (Zhizhin V. I., doctor of geological and mineralogical sciences, professor, Head of the Laboratory of Geothermal Cryolite zone of the Permafrost Institute), Gemmology (Pavlushin A. D. candidate of geological and mineralogical sciences, research engineer of the Laboratory of Geology and Petrology of diamondiferous provinces of the IGDNM), Genetic Mineralogy (Babushkina S. A., candidate of geological and mineralogical sciences, research engineer of the Laboratory of Geology and Petrology of diamondiferous provinces of the IGDNM), Metallogeny, Metallogeny of the North-East of Asia (Prokopiev A. V., candidate of geological and mineralogical sciences, Associate Professor, Deputy Director of the IGDNM for Research), draw up working programs and determine content and structure of the relevant disciplines.

Themes of course papers and diploma projects are agreed with employers. For example, course papers in the disciplines Structure of ore fields, Laboratory methods of studying mineral raw resources, Exploration and geological and economic evaluation of mineral resources deposits are performed according to the materials provided by employers to students during production practices.

Employers are regularly involved in lecturing on the disciplines Metallogeny, Metallogeny of the North-East of Asia (Prokopiev A. V., candidate of geological and mineralogical sciences, Associate Professor, Deputy Director of the IGDNM for Research). In the framework of the All-Russian scientific-practical conference “Geology and mineral and raw resources of the North-East of Russia”, employers’ lectures are given on topical issues of geology and geological study of subsoils. The Career Center of the NEFU conduct workshops on employment and career involving employers.

In addition, employers are involved as consultants in the development of special issues of diploma projects, such as: Makoshin Victor Igorevich, student of the group RM-07, final qualifying work “Prospecting and assessment works for Mangadeyskoe ore field”, etc.

Employers’ participation in the educational process improves quality of actual results of education, increases responsibility of the department, geology and exploration faculty and the NEFU in general in the educational process, increases quality of the structure and content of the Program, its periodic assessment, assessment of the students’ level of knowledge, staff advanced training.

Students enrolled in this program are involved in research work on the basis of the IGDNM using material and technical resources of the Institute. During the first production practice in mining and geological enterprises students use employers’ material and technical base and are paid.
CRITERION 10. STUDENTS’ PARTICIPATION IN DETERMINATION OF THE CONTENT AND ORGANIZATION OF THE EDUCATIONAL PROCESS ACCORDING TO THE PROGRAM

Conferences of freshmen and graduate students are held annually. Surveys, students’ informing about their results, interviews with students to determine the quality of teaching and educational and production practices are held. Curators and mentors regularly work with students in order to increase students’ professional interest, perform work to address problems of students’ adaptation in the social and living conditions of students’ life. Students’ results of education are evaluated using the Methodology of analysis of first-year students’ progress in separate disciplines (QMS-EST-4.2.1-006-12).

Council of leaders of the academic groups works in the faculty; trade union organization of the students of geological and exploration faculty works: functions of representation and protection of students’ rights at the level of the faculty and university, protection of social and economic and other rights of students defined by the Charter of the university, as well as representation of students’ interests in front of the university administration.

Council of leaders of the academic groups participates in the consideration of the GEP WC, in the administrative council, department meetings.

Documented procedures for obtaining information from students are regulated by the Charter of the NEFU and QMS-OLD-4.2.3-9-11 “Regulations on the procedure of formation, maintenance and storage of personal files of students of the NEFU” approved by the Rector on 11.07.2011.

Monitoring of students’ attitudes to the quality of educational resources used to implement the program is performed. According to the results, shortcomings of the program are identified and remedied.

Leaders of the academic groups receive monthly additional payment for social activities, letters of thanks.

Students take part in the educational process. Monitoring of students’ attitudes to the quality of educational resources used to implement the program is performed. According to the results, shortcomings of the program are identified and remedied.

Consideration of students’ appeals and complaints at the level of the department and faculty is regulated by QMS-OLD-4.2.3.-017-11 “Regulations on the procedure of students’ transfer and reinstatement in the NEFU”, version 1.0, approved by the Rector on 30.05.2012, QMS-OLD-4.2.3.-42-11 and other documents.

CRITERION 11. STUDENTS’ SERVICES AT THE LEVEL OF THE PROGRAM


Students who work in the university are offered the opportunity to pay tuition in installments and the opportunity to get educational loan in a bank-partner of the EE. Students are given the opportunity to transfer from paid to budget training after examination sessions twice a year, according to the results of the session, material indicators, achievements in social and sports life.

In the Internet at http://www.s-vfu.ru/ site students are given an open access to electronic scientific library of NEFU and web chair where students can watch and listen to interesting assembly lectures of best scientists of NEFU and other Russian high schools.
At biological-geographical faculty as of 11.02.2013 there are 37 students are trained on a commercial basis. These students have a possibility to pay training by credit, and also to use for training the educational credit received on favourable terms in partner-bank (Sberbank). Children of employees of NEFU who worked at university more than 15 years under the university Collective agreement are given the possibility to pay training at the expense of means of NEFU. As of 10.02.2013 at BGF at the expense of means of NEFU 2 students are trained (Safonova V.A., BH-11, Ushnitsky I.M., PP-11). On the basis of Charter of NEFU and Statute about current and intermediate certification of students of NEFU (see site of NEFU, sections "Documents" and “Administrative divisions”), the students who have shown good results in results in examinations, activity of scientific and public life of faculty and university have possibility to change paid training for budgetary. While transferring at a planned place by the commission on transfers and restoration of NEFU there is also considered a social and financial position of the student. As of 10.02.2013 in BGF 7 students are transferred from paid to a budgetary position. At excellent study, achievements in science, sports and art creativity in addition to the basic federal grant there are appointed nominal grants as support of talented student's youth organised by various funds and organisations. For example, grant of A.E.Kulakovsky - 3, grant of A.E.Mordinov - 1, grant of G.R.Basharin - 1, grant of V.A.Protodjakonov - 1, grant of P.H.Starovatov-2, grant of S.P.Sidorova-2, grant of P.A.Petrov-2, grant of I.N.Barahov-2, grant of A.I.Kuzmin, the grant of F.G.Safronov-1, State grant of SR (Y) - 7.

Since 2011 NEFU for the best students arranges free Christmas vacation in the central cities of Russia (Moscow, St.-Petersburg). By the results of 2012 150 students have received the monetary award “Christmas vacation in Moscow and St.-Petersburg” for successful study, in scientific, sports, public and creative activity. The program of Christmas vacation includes the extensive cultural program including acquaintance with Moscow and St.-Petersburg. The main event of vacation is visiting by students of NEFU together with the pro-rector on interaction with federal structures Alexey Tomtosov of a special economic zone of "Skolkovo".

The students of NEFU with personal statements and in case of available means of FSIO and corresponding documents are paid travel privilege for aviation and motor transport. For 2012 20 students of BGF got the travel privilege. In NEFU there is a system of organisation of a subsidized meals for students from socially-vulnerable segments, there is also a half paid voucher for a vacation center "Smena".

Today in NEFU there is great attention paid for productive leisure, physical development and for improvement of social conditions of students. All these actions are financed from means of NEFU. So, for the purpose of development of physical training and sports, propagation of a healthy way of life the federal university has got 180 units of training equipment. In yards' territory of Studying-laboratory and Main educational buildings, at stadium "Yunost" and in yards of hostels № 7-2, 7-1, 18, 20, 66-a, 66-b there are established sports training equipment.

In a hostel 17 (2) in 2012 a capital repairs has been done, round the building there are power saving sensors are installed, they are able to react to movement and automatically switched off, when the students leave their room. Besides, with a view of safety, on each floor in corridors and halls observation cameras are built in. On the territory of student campus there is a wireless Internet - wi-fi.

At university there are created all necessary conditions for students-invalids (hearing aids, ramps. Students with the limited abilities have flexible individual schedule of visiting of lecture lessons, competitions, and seminars).

Students are able to study additional programs and pass their training abroad. Annually the most scientifically-active part of students passes training courses in other countries, participating in the exchange program "Sever-severu" of University of Arctic regions. Training are held in Sweden, Norway, Finland, Iceland, etc. Northeast federal university has contracts (agreements): with faculty of sciences about Environment of the Earth of University of Hokkaido
(Japan) for development of the academic and educational exchanges and cooperation between two universities; with University Lini (China), Pusansky university (Korea) for development of exchange programs and for working out of joint programs on the organisation of students practices. The sphere of its activity includes Magadan area, Chukotka that expands possibilities of passing practices.

Students have access to 27 courses to increase the level of foreign language (English, French, German, Turkish and Chinese languages). Courses are conducted by teachers of chair of foreign languages. Students are suggested courses for beginners of natural specialities and areas, communicative English and the practical English grammar, English language in sphere of professional communications, business English for 3-5 courses, etc.

The health services are organised in polyclinic № 5, polyclinic of NEFU (66 building) and in sanatorium "Smena". The sanatorium is located in the centre of student campus on the basis of a student's hostel to the address: Yakutsk, 17, Kalandarashvili St., hostel 6, blocks A and B. Near there are available pool, sports complex, computer centre, cultural centre “Sergeljahskye ogny”, shops, drugstore, mail, etc.

Meals are arranged both in the buffet tables and in refectories of educational buildings and at food production facility № 5. The food production facility "Sergeleeh" includes the whole complex of public catering facilities - refectories of "Sergeleeh", institute of technology; cafe "Sergeleeh", at hostels № 6 block V № 7\1 № 8\1; buffets MTB, of medical and road institute, and also there are confectionery, meat-fish, vegetable, flour departments. Students of BGF have meals in a refectories and buffets of CFNS.

At biological-geographical faculty there are 3 computer classes intended for preparation of students to lessons with use of network resources of NEFU and informational Internet resources.

Since April, 1st, 2000 in NEFU there are Center of the Psychological help to students, where individual consultations are given, and psychological diagnostics is carried out, talks and seminars are delivered on different topics: Didactic adaptation (to training conditions in high school); Self-organising of the student; Stress removal before examinations, etc.; socially-psychological trainings are carried out.

At university there is a purposeful activity on support of small business, starting of new workplaces and help to students-businessmen. Within the limits of these actions annually in high school there are Days of student's business, seminars-trainings for the students, planning to open their business, competition of business projects among students-businessmen. At the initiative of the Center of career and students-businessmen of high school there were founded a public organisation “Council of students-businessmen of Sakha Republic (Yakutia)” which founders are 17 students-heads of the enterprises. The university together with Council opens a student's business incubator.

**CRITERION 12. ASSESSMENT OF THE QUALITY OF SCHOOL LEAVERS’ TRAINING**

Reception rules in NEFU establish the lower limits of results of Unified State Examination for the entrants entering budgetary places. In 2012 the lower limits in biology - 42 points, in Russian language and social science - 40 points that is above the lower limits established by Federal Education and Science Supervision Agency in biology, Russian-36, social science – 39.

According to the reception rules in NEFU the winners and prize-winners of the final stage of the All-Russian Competition of schoolchildren (subject), winners of workshop conference «Step to the future» enter without examinations. Winners, prize-winners of the List
of the Competition of schoolchildren (confirmed by the order of ME of the Russian Federation of 7.11.2011 №2598) are given privileges - a victory in biology, chemistry and to social science is estimated in 100 points.

Winners, prize-winners of NECS, graduates of faculty of pre-university education, specialization classes (a natural-science, physical and mathematical specialization), base schools with which there are long-term contracts, have advantage at equality of points.

In 2012 the lowest passing score of the enlisted entrants on budgetary places is -169; Unified State Examination grade point average in sum of results of Unified State Examination in 3 subjects - 58.2.

Professionally oriented work at faculty and chair will be organised on the basis of the plan of professionally oriented work, confirmed by rector of NEFU and Concepts of vocational counselling of NEFU for 2011-2019 (№ 238-ODES of 3/23/2011).

Chairs participate in all-university and faculty professionally oriented events:

Offsite "Days of university" - in 2011-2012 there were 20 offsite meetings with the general coverage of 2788 pupils of schools. In frameworks of professionally oriented offsite meetings with representatives of administrations, education departments, schools, with the public, parents, entrants, graduates, there are held courses on preparation for Unified State Examination and seminars for teachers, consultations of psychologists, there are signed contracts on cooperation.

“Doors Open Days at BGF” - spent 2012.28.03, all chairs took an active hand: dean Nikolaev A.N., Mihajlova N.V., Andreeva M.P, responsible for professional orientation work at chair (Lazareva P.V., Gogolev P.V., Sleptsova N.P.). Annually take part more than 60 pupils and parents.

“Week of FPUEPO NEFU” - spent in October, 2012 for pupils from 5-11 classes of educational institutions of Yakutsk. In various events of a week have taken part more than 8 000 of schoolchildren from 35 schools, about 300 parents, 150 teachers of schools and 250 teachers of university, and other events.

At faculty it is constantly conducted advertising - informational work: issued booklets about faculty, areas of preparation with the general circulation more than 1 000 copies. In the university newspaper “Our university” there appeared heading “Compass of the Entrant”. According to the schedule there were published information about reception campaign of faculty, preparation areas, and also materials on preparation for Unified State Examination in biology, chemistry; articles: “How to be prepared for Unified State Examination in chemistry (Andreeva M. P., Nahova N.A.” How to be prepared for Unified State Examination in biology” (Jakovleva A.V., Sofronov R.P.).

HETP of chair annually conducts consultations, lessons for potential entrants. First of all for pupils of contractual base schools, internally-correspondence school works within an academic year, teachers and students work in summer scientific camps, supervise research work of schoolchildren.

In the 2011-2012 academic year, at the preparatory department, with various forms of training, 141 people were trained, of which 39 people (27.6%) were admitted to the first year of the North-Eastern Federal University.

697 people were trained according to various programs of training courses for pupils of Yakutsk and graduates of past years, of which 286 people. (41.03%) were admitted to the first year of the NEFU.

The total percentage of admission of students of the faculty of pre-university education and career counseling to the first year of the North-Eastern Federal University is 38.7% (325
people). The total percentage of students of the preparatory department and courses admitted to high and secondary educational establishments is 92.4%.

The Association “North-Eastern University Education District” includes 65 secondary and comprehensive educational establishments. 957 people were admitted to the NEFU of the number of graduates of the schools-members of the Association (2206 people), i.e. 43.4%. This is 31.1% of the first-year students.
CVs of EXPERTS

**Expert's name: Dmitry N. Rebrikov**

<table>
<thead>
<tr>
<th>Work place, position</th>
<th>Russian State Geological Prospecting University named after Sergo Ordzhonikidze (MGRI-RGGRU), Deputy Dean of the Geological Prospecting Faculty, Professor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic degree, academic title</td>
<td>Ph.D. in Engineering, Associate Professor</td>
</tr>
<tr>
<td>Deserved titles, degree</td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>Higher, MISA National University of Science and Technology or MISiS</td>
</tr>
<tr>
<td>Professional achievements</td>
<td>More than 50 scientific works published, 4 student books + electronic applications.</td>
</tr>
<tr>
<td>Area of expertise</td>
<td>Subsurface management</td>
</tr>
<tr>
<td>Practical experience in the direction of the program, subject to examination</td>
<td>12 years</td>
</tr>
</tbody>
</table>

**Expert's name: Svetlana Yu. Popkova**

<table>
<thead>
<tr>
<th>Work place, position</th>
<th>Deputy Head of the Business college №11, Moscow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic degree, academic title</td>
<td>n/a</td>
</tr>
<tr>
<td>Deserved titles, degree</td>
<td>n/a</td>
</tr>
<tr>
<td>Education</td>
<td>Higher. Russian State Geological Prospecting University named after Sergo Ordzhonikidze</td>
</tr>
</tbody>
</table>
| Professional achievements | 1. The developer of standard and study programs for the qualification 261401.01 "Adamants to diamonds cutter" and for the specialty 261003 "Technology of processing of diamonds."
2. The developer of the process card for the College Production Department in the qualification "Adamants to diamonds cutter" and "Technology of processing diamond materials".
3. Preparation and holding of the 1st International Professional Contest "Best in Profession 2011".
4. Member of II Assembly of Employers and Social Partners of the professional education system.
5. Organization and holding of the meeting of the Supervisory Board of the Resource Center "School of diamond cutting" of the Business College №11.
6. Preparing and conducting master classes "Performance of practical methods of work on technologies for processing diamonds" as a part of the city event Workshop on "Evaluation of diamonds and diamond materials assessment methodology" (for deputy directors, trainers, teachers and industrial trainers of elementary and secondary education).
7. Organization and holding of training and refresher courses for adults. |
| Practical experience in the direction of the program, subject to examination | 10 years |

**Expert's name: Andreas Hoppe**

| Work place, position | International expert, Professor, Georesources and Geodamage Department of the Technical University of Darmstadt, Darmstadt, Germany. |