ASIIN Seal

Accreditation Report

Bachelor's and Master's Degree Programme
Geography
Bachelor's Degree Programme
Geography (pedagogical)

Provided by
Al Farabi Kazakh National University

Version: 23.03.2018

Table of Content

A About the Accreditation Process

Name of the degree programme (in original language)	(Official) English translation of the name	Labels applied for [1]	Previous accreditation (issuing agency, validity)	Involved Technical Committees (TC)[2]
5B060900, География (каз, рус)	Bachelor of natural sciences in "Georgraphy	ASIIN	2009-2015	TC 11
6M060900, География (каз, рус)	Master of natural sciences in "Georgraphy"			
5B011600, География (Научно педагогоическое направление (рус)) (Ғылыми - педагогикалық бағыт (каз))	Bachelor of pedagogic sciences in "Georgraphy"			
Date of the contract: 26.01.2016 **Submission of the final version of the self-assessment report:** 15.10.2016 **Date of the onsite visit:** 12.-13. December 2016 **at: Almaty**				
Peer panel: Prof. Dr. Peter Bagoly-Simo, Humboldt University Berlin; Prof. Dr. Andreas Dittmann; University of Giessen; Prof. Dr. Christoph Eipper, Envi Experts;				

[1] ASIIN Seal for degree programmes;

[2] TC: Technical Committee for the following subject areas: TC 01 – Mechanical Engineering/Process Engineering; TC 02 – Electrical Engineering/Information Technology); TC 03 – Civil Engineering, Surveying and Architecture; TC 04 – Informatics/Computer Science); TC 05 – Physical Technologies, Materials and Processes); TC 06 – Industrial Engineering; TC 07 – Business Informatics/Information Systems; TC 08 – Agronomy, Nutritional Sciences and Landscape Architecture; TC 09 – Chemistry; TC 10 – Life Sciences; TC 11 – Geosciences; TC 12 – Mathematics; TC 13 – Physics.

Tatiana Oitseva (Student), East Kazak State Universty; Prof. Dr. Mark Vetter, University of Applied Sciences Karlsruhe	
Representative of the ASIIN headquarter: Dr. Michael Meyer	
Responsible decision-making committee: Accreditation Commission for Degree Programmes	
Criteria used: European Standards and Guidelines as of 10.05.20015 ASIIN General Criteria, as of 28.06.2012 Subject-Specific Criteria of Technical Committee 11 – Geosciences as of 09.12.2011	

B Characteristics of the Degree Programmes

a) Name	Final degree (original/English translation)	b) Areas of Specialization	c) Corresponding level of the EQF[3]	d) Mode of Study	e) Double/Joint Degree	f) Duration	g) Credit points/unit	h) Intake rhythm & First time of offer
Bachelor Geography	География (каз, рус)	Bachelor of natural sciences in "Georgraphy	6	Full time	--	8 Semester	240 ECTS	1 September 2004
Bachelor Geography (pedagogical)	География (Научно педагогоическое направление (рус)) (Ғылыми - педагогикалық бағыт (каз)	Bachelor of pedagogic sciences in "Georgraphy"	6	Full time	--	8 Semester	240 ECTS	1 September 2004
Master Geography	География (каз, рус)	Master of natural sciences in "Georgraphy"	7	Full time	--	4 Semester	120 ECTS	1 September 2004

For the Bachelor's degree programme in geography the institution has presented the following profile in the diploma supplement:

The educational programme aims to train highly qualified professionals with strong knowledge of general geography associated with the knowledge of the land, basic laws of nature and society, impact of human activity on the environment, the principles of nature conservation, environmental management and sustainable development. Graduates will get a degree in geography which should enable them to get employed as quickly as possible in the specialty.

For the Master's degree programme in geography the institution has presented the following profile in the diploma supplement:

The programme aims to ensure the conditions for a full, high quality professional education, professional competence in the field of geography. Formation of competitiveness of graduates will provide possibility of their fastest employment in the specialty. Students should participate in the field of environmental expeditions in order to carry out projects

[3] EQF = The European Qualifications Framework for lifelong learning

of protected natural areas, monitoring of population, migration and ethno-cultural processes that ensure the ecological safety of the national economy and other spheres of human activities, to develop and implement standards for quality of life and the rational use of natural resources.

For the Bachelor of education in geography the institution has presented the following profile in the diploma supplement:

The educational program is aimed training highly qualified competitive pedagogical staff in the field of geography for education institutions, including schools and colleges. To achieve this, must be perform a number of tasks, including the purposeful formation of a contingent of students, specialized theoretical and practical training of students in the learning process focused on the current needs of the employer.

Students should get strong knowledge and competences of area of geographical science and a technique of teaching of geography, acquired geographical theories and regularities, concepts the investigative communications, possessing spatial thinking and deep erudition. Further on they are able to carry out the pedagogical and methodical analysis of educational process and educational activity being trained, understanding essence of educational process in an education system. Students know bases of the research work, are capable to perform independently educational and research work and possess skills of self-education.

C Peer Report for the ASIIN Seal[4]

1. The Degree Programme: Concept, content & implementation

Criterion 1.1 Objectives and learning outcomes of a degree programme (intended qualifications profile)

Evidence:

- Self-assessment report
- Webside of the faculty
- Diploma supplements provides detailed and subject specific information on the degree programes
- Discussions with representatives of MUST management, programme coordinators, lecturers, business representatives, students

Preliminary assessment and analysis of the peers:
The University defined study aims and intended learning outcomes of both programmes at a level of higher education which corresponds to learning outcomes relevant to level 7 of the European Qualifications Framework. Learning outcomes are accessible to students, staff members, and all the other stakeholders on the faculty web site. Those objectives were discussed in staff meetings with the faculty team. Private companies and governmental institutions are involved in the development of the programmes by a certain council in the university. Additionally representatives of the labour market are involved in the further development of the programme via master theses of the students and the internships. Out of these involvements of the industry the university gets substantial feedbacks from the labour market about the objectives, contents and quality of the programmes. The panel welcomed the transparent way to public the objectives and the intention of the faculty to get a permanent feedback from representatives of the labour market.

[4] This part of the report applies also for the assessment for the European subject-specific labels. After the conclusion of the procedure, the stated requirements and/or recommendations and the deadlines are equally valid for the ASIIN seal as well as for the sought subject-specific label.

The peers referred to the Subject-Specific Criteria (SSC) of the *Technical Committee Geosciences* as a basis for judging whether the intended learning outcomes of the Master programmes as defined by Al-Farabi Kazakh National University correspond to the exemplary constituted learning outcomes of these Technical Committees. The auditors examined the areas of competence as set forth by the SSC.

Regarding the two bachelor's degree programmes the peers wondered about the different qualifications. They learned during the audit that graduates from both programmes are allowed to teach in school but only graduates from the "normal" bachelor programme may teach at universities as well. Also graduates from both programmes are allowed to enter master's degree programmes but those from the educational bachelor may not work at research institutes out of the university. From the point of view of the peers it would be necessary to make these different qualifications transparent to stakeholders in the objectives of the programmes. Additionally they determined that the objectives of the educational bachelor programme contain pedagogical competences of the graduates but not didactical ones. For the peers specific geographical didactical competences are an essential part of the qualification of the graduates and have to be described in the objectives of the educational programme as well.

Regarding the master's degree programme the peers determined that the objectives fit the knowledge, abilities and competences defined in the SSC.

Criterion 1.2 Name of the degree programme

Evidence:

- Websites of the degree programmes
- Self-Assessment Report

Preliminary assessment and analysis of the peers:
The titles of the programmes are published on the subject specific webpages. The information about the programmes is published in Kazakh and Russian language and partly in English as well. The study programmes are primarily carried out in Kazakh and Russian language.

For all programmes the peers confirmed that the name reflect the programme objectives and intended learning outcomes appropriately.

Criterion 1.3 Curriculum

Evidence:

- The study regulations define the curriculum and the single modules.

- The module descriptions inform about the aims and content of the single modules.
- Objective-Matrices provided in the Self-Assessment Report
- Discussions with representatives of Al Farabi management, programme coordinators, lecturers, business representatives, students

Preliminary assessment and analysis of the peers:
As outlined under criterion 1.1, the auditors could see that the intended learning outcomes are in line with the Subject-Specific Criteria (SSC) of the Technical Committee "Geosciences". The peers based their assessment as to whether the curricula of the programmes are designed in a way to achieve the intended learning outcomes according to the module descriptions and the Objectives-Module-Matrix.

The curriculum of the bachelor's degree programme in geography includes compulsory state modules (History of Kazakhstan, Kazakh or Russian language, foreign language,) and compulsory vocational modules divided in natural science modules (Information communication technology, mathematical methods in geography, general earth science), basic professional modules (soil science, general hydrology, technical and economic bases of production, quantitative methods in geopgraphy, topography with geodesy, safety of human life, ecological and sustainable development, geology, general meteorology, theoretical bases of social and economic geography, economic, social and political geography, geography of population, philosophy of scientific cognition, geomorphology, cartography, photogram metrics and remote sensing, physical geography of Kazakhstan, physical geography of continents and oceans, biogeography). In all three categories there are additional elective courses. During the sixth and seventh semester student have the opportunity to define an individual study plan in consultation with the advisors. During the eighth semester students absolve the internship and write the bachelor thesis.

The peers learned that climate aspects and in general environmental aspects are dealt in several modules. From there point of view the curriculum ensure that the students could get knowledge, abilities and competences as defined in the Subject Specific Criteria of ASIIN.

The curriculum of the educational bachelor's degree programme in geography is quite similar to the other geographical bachelor programme. While the state and natural science modules are similar there are some additional pedagogical modules in the professional category (introduction to pedagogical profession, theory and methods of educational work, pedagogies, age physiology and school hygiene, ethno pedagogies). For their individual study plan in the sixth and seventh semester additional didactical modules are offered to the students (methods of teaching geography, innovative methods of teaching geography,

teaching techniques). The internship during the eighth semester students have to absolve in schools.

The peers determined that the curriculum is focussed more on field specific aspects of geography and more research oriented than on pedagogical or didactical themes. Nevertheless several modules are included into the mandatory professional modules regarding general pedagogical aspects which ensure, from the point of view of the peers, that students get an acceptable pedagogical background to teach at schools. But the panel doubted that all students also get enough specific didactical skills to teach geography due to the fact that all specific didactical modules are only electives. In case students do not choose those courses they would come to school without any knowledge how to educate pupils in geography.

The peers could understand the intention of the university to educate research oriented teachers. But from their point of view the university would reach a unique position in the region as well if the education would be more concentrated on teaching competences and graduates would be well prepared for teaching at schools and additional would have certain abilities in regard to research. It would not be an adequate qualification for graduates of an educational study programme to have no specific didactical competences. Therefore they found it necessary to ensure that all graduates get adequate specific didactical competences.

The curriculum of the master's degree programme in geography includes compulsory state modules as well (History and Philosophy od Science, foreign language, organisation and planning of research projects, geography of population and labour resources, pedagogic and psychology) and compulsory professional modules (management of scientific projects, actual problems of geography, geospatial environmental management, theoretical and methodological problems of geography, models in geography). Additional students could follow individual paths of study. The forth semester contains an internship and the master thesis.

The peers determined that up to now there are no modules taught in English in the bachelor programmes. In the master programme some IT-modules are in English language. Therefore the peers could understand why students wish to get more opportunities to improve their English language skills.

In general the peers confirmed for the bachelor's and the master's degree programmes in geography that the overall objectives and intended learning outcomes for the degree programmes are systematically substantiated in the modules and that the curricula enable students to achieve the intended learning outcomes in order to obtain the degree. For the

educational bachelor's degree programme in geography the peers determined a lack of didactical competences for the graduates.

Criterion 1.4 Admission requirements

Evidence:

- Self-Assessment Report
- admission rule (#109 since January 19, 2012) developed by the Ministry of Education and Science
- Academic Policies: The main provisions of the academic policy of Al-Farabi Kazakh National University

Preliminary assessment and analysis of the peers:

The access to the Bachelor's level requires the completion of secondary education as well as passing a nation-wide general test. For both bachelor programmes there are no practical experiences required.

Only applicants out of Bachelor's degree programmes from a similar scientific background are allowed to be admitted in the master's degree programme. Additionally applicants have to pass a national exam covering a second language and another programme specific written exam organized by the faculty. Retake of these exams is not allowed. National scholarships set for each subject are offered to those with the best results. International students can apply for the Higher Education Institutes by taking the complex test (Bachelor degree) and University entrance exams.

The auditors confirmed that the requirements and procedures for admission are transparent and clear. All applicants are treated according to the same standards and regulations. According to the peers, especially the programme specific exam supported the students in achieving the learning outcomes.

Final assessment of the peers after the comment of the Higher Education Institution regarding criterion 1:

With its comments on the report the university send rewrote objectives for the educational bachelor's degree programme:

"In order to form students' understanding of the psychological and pedagogical foundations of geography teaching and special didactical competencies among graduates of the pedagogical profile, it is necessary to provide a broader view about modern methods of geography teaching. An in-depth familiarization of students with the system and means of geography teaching in the secondary school and the specifics features of working with

them, and to disclose the forms of organization of geography teaching and to show their features is required."

[…]

"As a result, graduates acquire the following knowledge, skills and professional competencies:

To know:

- the systems of geographical sciences and understand their ecologization, humanization and sociologization and the geographical laws and patterns;
- the connection of the methodology of geography teaching with other sciences: geography, didactics, psychology and logic, and the connection of the methodology of geography teaching with practice;
- the experience of creative activity in the content of education.

To be able to:

- to conduct the selection and generalization of the training material;
- to implement the principle of scientificity and availability in teaching;
- to analyze the content of the school programs on geography;
- to identify in the contents of the school course of geography and facultative geographical disciplines the scientific doctrines, theories, concepts and hypotheses;
- to give examples that prove the connection between the foundations of geographic science with life;
- to carry out research work in the framework of studying geography in school;

To manage:

- by innovative methods of teaching in geography and the theoretical foundations of a geographical forecast;
- by modern technologies of the differential teaching using elements of a problematic and individual approach, and a personality-oriented learning."

The peers welcomed that the university added the intended pedagogical and didactical competences of the students which seemed to be adequate to enable graduates to teach at schools. On the other side the peers wondered that the university only added additional objectives and did not reduces other intended objectives of the programme. The peers got

the impression that graduates of the educational programme should get the same knowledge, abilities and competences than the graduates of the scientific bachelor programme and additional the described pedagogical and didactical skills. From their point of view it seems to be unrealistic that students could get more competences in one of the programmes while the foreseen study time is similar in both programmes. Further on, the peers wondered that graduates of the educational bachelor should get broader competences while the attainable formal qualification is less than in the scientific programme. Hence the peers did not see that the new objectives define the different educational objectives/learning outcomes in a way that they describe the different academic, subject-specific and professional classification of the qualifications gained in both bachelor's degree programmes. They suggested an appropriate requirement.

Regarding the curriculum the peers welcomed that the university replaced two mandatory modules by two new field specific didactical courses in the educational bachelor's degree programme. But they doubt whether two modules would be enough for students to get adequate didactical competences to teach geography in schools. They understood that the university could not define as many mandatory modules as it like to do. But to add some more didactical aspects in the curriculum i.e. rules could be defined that a certain number of elective courses has to be chosen by the students out of the didactical field. The peers suggested a general requirement to ensure that all graduates get adequate didactical competences.

Finally the peers welcomed warmly that the university plans to teach more modules in English languages.

In general the peers assessed the criterion as partly fulfilled.

2. The degree programme: structures, methods and implementation

Criterion 2.1 Structure and modules

Evidence:

- Self Assessment Report
- Module descriptions:
- Discussions with representatives of Al farabi management, programme coordinators, lecturers, students

Preliminary assessment and analysis of the peers:
The curricula is structured in mandatory and elective courses in each of the categories of state modules, social and communication modules and professional modules. Field work and internships have to be absolved separated from these categories. The geographical content is divided generally into the fields of physical geography, social geography and landscape management. Students start with physical geography which is either regional or global oriented followed by landscape management and social geography. At the End the physical geography of Kazakhstan and neighboring countries is handled.

The peers assessed that the degree programmes under review are divided into modules and their structure is clearly outlined on the subject specific website. Each module is a sum of teaching and learning whose contents are concerted. With its choice of modules, the structure ensures that the learning outcomes can be reached and allows students to define an individual focus and course of study.

In general the module structure with its elective courses allows students to absolve studies abroad without any structural conditioned loss of time. To facilitate the mobility of the students the university has defined rules for the recognition of credits acquired at other higher education institutions based on the competences of the students. Prerequisite for the recognition is an accreditation of the foreign programmes.

As the panel learned there are only few students absolving studies abroad mainly due to organisational difficulties on the one hand and a lack of language skills to the other. Therefore the peers could follow the wish of the students to have a more extended offer of international exchange programmes and to get better English language skills especially with regard to specific geographical English. Therefore the peers recommended to increase the preparation of the students and their support for academic mobility by additional cooperation with foreign universities regarding student exchange programmes and by offering more opportunities for students to increase their specific geographical English language skills.

Criterion 2.2 Work load and credits

Evidence:

- Self-Assessment Report
- ECTS users' guide of Al-Farabi Kazakh National University
- Module Handbooks for both degree programmes
- Discussions with representatives of the management of the university, programme coordinators, lecturers, students

Preliminary assessment and analysis of the peers:
The peers understood that the university uses on the one side a Kazakh national credit point system based on contact hours and on the other side ECTS credit points based on the student workload. The university defined the curricula with 30 ECTS points per semester on average and 30 hours of student workload per ECTS point.

Considering the named ECTS points for the single modules the peers assessed the estimated time budgets as realistic to enable students to complete the degree without exceeding the regular course duration. Structure-related peaks in the workload have been avoided by the university. The students confirmed this assessment of the peers.

Criterion 2.3 Teaching methodology

Evidence:

- Self Assessment Report
- Module descriptions:
- Discussions with representatives of MUST management, programme coordinators, lecturers, business representatives, students

Preliminary assessment and analysis of the peers:
The programmes under review are full-time programmes with classroom, structured and self-study activities. The single courses are offered either in Kazakh or Russian language depending of the student majority. Some modules are offered in both languages and there are modules in English language as well.

The staff members apply various teaching and learning methods (such as lectures, computer training and classroom and lab exercises, field work, excursions, individual and group assignments, seminars). Structured activities include tutorial, homework, assignment and practical activities.

In the bachelor's degree programmes the Al Farabi university have cooperation with some foreign university for long distance learning. Here students from Al Farabi university may follow lectures at the partner university online.

Regarding project oriented learning the peers got the impression that group project assignments are given in some courses to develop students' skill in teamwork and communication. The peers welcomed that the faculty tries actually to change to more project oriented teaching methods and gave the recommendation to follow this engaged way.

The peers learned that students get reading lists to work on during the semester but they assessed that the literature on these lists is rather old because the list were written already

five years ago for the first accreditation. Therefore they recommended to add basic literature to the module descriptions which were actualised more often.

In General the peers concluded also with reference to the remarks of the students that the teaching methods and instruments support the students in achieving the learning outcomes.

Criterion 2.4 Support and assistance

Evidence:

- Self Assessment Report
- Discussions with representatives of management of the university, programme coordinators, lecturers, business representatives, students

Preliminary assessment and analysis of the peers:
The peers welcomed the concept of an academic advisor. Each year of students has a special lecturer as advisor in field specific questions and as well as for administration problems. Usually, the academic advisor is available for any consultation a student may need, even for problems beyond academic matters. The students confirm that the academic advisors normally try to be very supportive to students.

Additionally there are several centralized institutions at Al Farabi University for the general support of students. The peers underlined that the allocated advice and guidance, namely the academic advisor assisted the students in achieving the learning outcomes and in completing the course within the scheduled time.

The peers learned as well that the university gives support for the students to find companies or institutions for the internship. This support is focussed on bachelor students because students in master's degree programmes already have experiences from their internship during the bachelor studies. The university has defined criteria which companies have to fulfil if they are offering internships for students.

Student conferences during summer time are a speciality for the programmes in geography. During these conferences students write small articles and get support from lecturers to recognise their own fields of interest regarding the later specialisations.

The peers confirmed that there are enough resources available to provide individual assistance, advice and support for all students and that the allocated advice and guidance assist the students in achieving the learning outcomes and in completing the course within the scheduled time.

Final assessment of the peers after the comment of the Higher Education Institution regarding criterion 2:

The peers welcomed that the university announced to close additional contracts with European University about student exchange programmes. They welcomed as well that the university will add basic literature to the module descriptions in the near future.

The peers assessed the criterion as fulfilled in general but they suggested recommendations about the English language skills of the students, their academic mobility and the project oriented learning.

3. Exams: System, concept and organisation

Criterion 3 Exams: System, concept and organisation

Evidence:

- Self Assessment Report
- Module descriptions
- Discussions with representatives of management of the university, programme coordinators, lecturers, students

Preliminary assessment and analysis of the peers:

The peers comprehended that for each module a midterm, an end-of-term and a final examination is foreseen. Exams are module-related and offer students continuous feedback on their progress in developing competences. Midterm and end-of-term control is held in the form of quizzes, tests, presentations, essays, class discussions, roundtables, simulations and other assignments. The exact form of regular and interim control is determined by a lecturer depending on specifics of a concrete module; it is determined in the syllables students get at the beginning of the semester. Final examinations can be oral, written, in the form of tests, or take a combined form (oral-written or written-testing). The form of a final examination is suggested by a lecturer and must be approved by the department's Academic Board.

The number and distribution of the exams ensure that both the exam load and preparation times are adequate. All exams are organised in a way which avoids delays to student progression caused by deadlines, exam correction times, re-sits etc. All exams are marked using transparent criteria. There are mechanisms in place which ensure that exams marked by different examiners are comparable. Failed exams can be repeated as often as students like to do but they have to pay credit fees for the repetition.

Out of the assessment of the final theses in the master's degree programme the peers got the impression that students are not familiar with scientific principles for writing a paper. Further on there are no discussions about the actual research situation of the specific field the theses are about. The peers were astonished about these problems all the more that during the first accreditation the quality of the master theses were assessed only as "acceptable". Hence the peers could not determine any positive development regarding the quality of the master theses with regards to formal aspects. Although the content of the theses is adequate to the intended qualification it is necessary that the university ensures that all students generate their final master thesis considering adequate scientific principles. One way could be to define requirements for the final thesis and to offer students some kind of checklist how to generate a scientific paper.

Final assessment of the peers after the comment of the Higher Education Institution regarding criterion 3:

The peers welcomed the new requirements for master theses defined by the university. From their point of view these requirements fulfil international standards. But the new regulations only partly match the problem mentioned by the peers because they do no deal about scientific principles in details (citation, bibliography etc.). Therefore they confirmed their former assessment and suggested a requirement about the use of scientific principles in final theses.

They assessed the criterion as partly fulfilled.

4. Resources

Criterion 4.1 Staff

Evidence:

- Self Assessment Report
- Staff handbook
- Discussions with representatives of management of the university, programme coordinators, lecturers,

Preliminary assessment and analysis of the peers:

In general the peers noticed that the composition, scientific orientation and qualification of the teaching staff team are suitable for sustaining the degree. Most of the younger lecturers studied abroad and speak English while the older lecturers mostly grown up with the Russian system and only stood abroad in Russian speaking countries.

The auditors noticed that the self-assessment report provided a overview of the research activities carried out in the last years. Most of the research projects were placed in Kazakhstan or Russia but also in European countries like Germany. The funds are coming from governmental institutions, private companies and also international institutions. Al-Farabi Kazakh National University highlighted that research funding is playing an increasingly important role with regard to the overall budget of the University and the upgrading of research equipment.

Criterion 4.2 Staff development

Evidence:

- Self Assessment Report
- Discussions with representatives of Al Farabi management, programme coordinators, lecturers,

Preliminary assessment and analysis of the peers:
The university explained that there were several concepts to enhance the didactical competences of staff members. For the didactical further education the "Institute of qualification improvement" which is an integral part of the University's structure offers a bride offer of special courses. Staff members who wish to further develop their professional skills can participate in international conferences, seminars, etc. During the onsite visit the members of the teaching staff expressed their general satisfaction with their opportunities to further improve their teaching and professional skills. The peers welcomed the additional offer of the university to train lecturers in English language because not all lecturers who met the peers speak English fluently.

In summary, the auditors confirm that Al-Farabi Kazakh National University offers sufficient support mechanisms and opportunities for members of the teaching staff who wish to further develop their professional and teaching skills.

Criterion 4.3 Funds and equipment

Evidence:

- Self Assessment Report
- Onsite visit of the institution and laboratories
- Discussions with representatives of management of the university, programme coordinators, lecturers, students

Preliminary assessment and analysis of the peers:
The peers learned that financial sources for Al Farabi University originated from tuition fees, government funding and private funding of companies. The operational funds were distributed to the Faculties and Schools of the university based on a specific formula depending on the number of students. The peers were convinced that the financial sources were sufficient and secured for the timeframe of the accreditation.

Research activities are financed by special research funds of the government and by international or national private projects. These funds are not given directly to the faculty but to the scientific department of the university. 10% of the funds are paid to students involved in the projects.

The peers inspected the classrooms, library and laboratories in order to assess the quality of the infrastructure and the technical equipment. They found out that students get access to international literature by online libraries in general. But since several months the licenses for the online libraries are finished and should be extended on January 2017. The peers also saw only limited equipment of the library regarding international English literature. From the point of view of the peers the access of the students ot modern English literature should be improved.

Regarding the technical equipment especially in the field of GIS which is involved in most programmes of the faculty (geodesy, geography, cadastre and land management) they learned that the university do not have enough licenses for modern software. The existing licences mostly are reserved for the research activities of the lecturers. Therefore students become familiar with computer applications during their internship in private companies or governmental institutions. For this the university has cooperation agreements with certain companies and institutions to ensure that students have the opportunity to get to know actual GIS software. The peers observed that this approach would be sufficient for the students to become able to apply the software. But they are not sure whether students will learn at companies the theoretical backgrounds for the use of GIS software. From their point of view it would be eligible to get the needed licenses by the university itself and to modernise the computer hardware in order to run modern GIS programmes in all computer pools which are in use for the programmes.

During their inspection of the institution the peers saw only a few workplaces for the self-study of students or for group work. Students confirm that there are poor opportunities to do group work inside the university. Therefore the peers recommended to offer more workplaces for the individual work of the students.

Final assessment of the peers after the comment of the Higher Education Institution regarding criterion 4:

The peers welcomed the announcement of the university to increase the access of students to modern English literature. But because of the lack of time the university could not implement the announced improvements. Hence the peers confirmed their former assessment and suggested an appropriate requirement.

Regarding the working places for individual work of students the peers registered the remark of the university to the new library. Due to the fact that the library is used by students of all departments there still is not much space for the individual work of students. Hence they confirmed the recommendation to offer more workplaces for the individual work of the students.

Further on the peers welcomed that the university already started to update the computer hardware and software especially in the field of GIS and recommended to go on.

In general the peers assessed the criterion widely fulfilled.

5. Transparency and documentation

Criterion 5.1 Module descriptions

Evidence:

- Module descriptions

Preliminary assessment and analysis of the peers:

The peers positively noted that the full set of modules descriptions is published for the degree programme under review. Hence, the module descriptions are available for all interested stakeholders. The peers examined the module descriptions and noted that the modules have comprehensible names and identification codes, that responsible persons are named, the teaching methods are specified and the workload is defined in connection with the credit points for each module. Additionally the contents and objectives of the modules are described, their admission and examination requirements as well as the forms of assessments. The peers only marked that there is no literature recommended in the descriptions. From their point of view such additional information would be helpful for the self studies of the students.

Criterion 5.2 Diploma and Diploma Supplement

Evidence:

- Examples of the Diploma Supplements

Preliminary assessment and analysis of the peers:

After graduation a certificate in Russian and Kazakh language is issued together with a Diploma Supplement in English language. The Diploma Supplements contain information in detail about the educational objectives, intended learning outcomes, the structure and the academic level of the degree programmes as well as about the individual performance of the student and give an overview about the Kazakh education system. But the peers missed in addition to the final mark, statistical data as set forth in the ECTS User's Guide to allow readers to categorise the individual degree. They saw the need to add this information to the Diploma Supplements.

Criterion 5.3 Relevant rules

Evidence:

- Self-Assessment Report
- Academic policy of Al-Farabi Kazakh National University
- Standard rules for current progress control, midterm and final attestation of students in higher educational institutions

Preliminary assessment and analysis of the peers:

The peers confirmed that the rights and duties of the University, lecturers and students are clearly defined in documents related to academic policy, academic council, quality management system and normative documents on academic processes. All relevant course-related information is available in Kazakh and Russian language and accessible for anyone in the intranet of the university. The subject specific websites provide only limited information on the different degree programmes. The peers underlined that it would be helpful if all relevant information would be made available on the specific websites of the programmes.

Final assessment of the peers after the comment of the Higher Education Institution regarding criterion 5:

Regarding the statistical data about the final grade the peers explained, that this information should enable stakeholders to categorise the final grades by knowing how many of the graduates get the best grade, the second best or the worst grade.

The peers assessed the criterion widely fulfilled.

6. Quality management: quality assessment and development

Criterion 6 Quality management: quality assessment and development

Evidence:

- Self Assessment Report
- Academic policy of Al-Farabi Kazakh National University
- Discussions with representatives of management of universities, programme coordinators, lecturers, students

Preliminary assessment and analysis of the peers:

The auditors were explained that the university applied two types of quality assurance system, namely the Internal Quality Assurance and External Quality Assurance systems. The Internal Quality Assurance encompasses all activities focused on the improvement of teaching and learning quality within the university. The internal quality regulations based on the European Standards and Guidelines as well as on eastern European frameworks and national standards. The External Quality Assurance focused on both national and international accreditation while round 80% of the programmes were accredited by international agencies listed by EQAR.

The internal teaching evaluation takes place each semester for each course. Feedback loops to the head of department, the head of university and to the students are defined. The results of the evaluation could influence the decision of further employment of the single lecturer.

The peers confirm that the programmes are subject to regular internal quality assessment procedures aiming at continuous improvement. For the purposes of continued development responsibilities and mechanisms are defined. Collected data are suitable for the purpose and used to continue improving the degree programme, especially with a view to identifying and resolving weaknesses. Students and other stakeholders take part in the quality assurance process. The results of the teaching evaluations are published in the intranet of the university.

Final assessment of the peers after the comment of the Higher Education Institution regarding criterion 6:

The university did not give a comment to this criterion. Hence the peers confirmed their former assessment. The sow the criterion completely fulfilled.

D Additional Documents

No additional documents needed

E Comment of the Higher Education Institution

The university gave a detailed comment on the report of the peers and add several new documents.

F Summary: Peer recommendations

The peers recommend the award of the seals as follows:

Degree Programme	ASIIN-seal	Subject-specific label	Maximum duration of accreditaiton
Bachelor Geography	With requirements for one year	--	2023
Master Geography	With requirements for one year	--	2023
Pedagogical Bachelor Geography	With requirements for one year	--	2023

Requirements

For the all programmes

A 1. (ASIIN 4.3) Improve the access for students to modern English literature (both books and journals) in the library

A 2. (ASIIN 5.2) Provide statistical data according to the ECTS-Users‘ guide in addition to the final grade.

For both bachelor’s degree programme

A 3. (ASIIN 1.1) Draft the different educational objectives/learning outcomes in a way that they describe the different academic, subject-specific and professional classification of the qualifications gained in both degree programmes.

For the pedagogical Bachelor

A 4. (ASIIN 1.1, 1.3) Ensure that all graduates get adequate didactical competences.

For the master programme

A 5. (ASIIN 3) Ensure that all students generate their final theses considering adequate scientific principles (for example by defining requirements for the final theses).

Recommendations

E 1. (ASIIN 2.1) It is recommended to offer more opportunities for students to increase their specific geographical English language skills.

E 2. (ASIIN 2.1) It is recommended to increase the preparation of the students and their support for academic mobility.

E 3. (ASIIN 2.3) It is recommended to increase project oriented learning.

E 4. (ASIIN 4.3) It is recommended to offer more opportunities for the students to get familiar with GIS applications and to modernize computer equipment in order to run modern GIS programmes in all computer pools which are in use for the programmes.

E 5. (ASIIN 4.3) It is recommended to offer more workplaces for the individual work of the students.

E 6. (ASIIN 4.3) It Is recommended to finance licences for actual GIS software in the quantity needed for the in house education of the students.

E 7. (ASIIN 5.1) It is recommended to provide an adequate list of relevant literature references in the module descriptions.

G Comment of the Technical Committee

The Technical Committee discussed the report and followed the assessment of the peers without any changes.

The Technical Committee 11 – Geosciences recommends the award of the seals as follows subject to the final assessment of the peers:

Degree Programme	ASIIN-seal	Subject-specific label	Maximum duration of accreditaiton
Bachelor Geography	With requirements for one year	--	2023
Master Geography	With requirements for one year	--	2023
Pedagogical Bachelor Geography	With requirements for one year	--	2023

H Decision of the Accreditation Commission (31.03.2017)

The Accreditation Committee discussed the procedure and made some editorial changes to clarify the requirements and recommendations. Further oh the Committee followed the assessments of the peers and the Technical Committees involved without any additional changes

The Accreditation Commission for Degree Programmes decides to award the following seals:

Degree Programme	ASIIN-seal	Subject-specific label	Maximum duration of accreditation
Bachelor Geography	With requirements for one year	--	2023
Master Geography	With requirements for one year	--	2023

Degree Programme	ASIIN-seal	Subject-specific label	Maximum duration of accreditation
Bachelor Geography (Pedagogical)	With requirements for one year	--	2023

Requirements

For the all programmes

A 1. (ASIIN 4.3) Improve access for students to international scientific texts (both books and journals) in the library.

A 2. (ASIIN 5.2) Provide statistical data according to the ECTS-Users' guide in addition to the final grade.

For both bachelor's degree programme

A 3. (ASIIN 1.1) Rewrite the different educational objectives/learning outcomes in a way that they describe the different academic, subject-specific and professional classifi-cation of the qualifications gained in both degree programmes.

For the pedagogical Bachelor

A 4. (ASIIN 1.1, 1.3) Ensure that all graduates get adequate didactical competences.

For the master programme

A 5. (ASIIN 3) Ensure that all students prepare their final theses according to modern scientific principles (for example by defining requirements for the final theses).

Recommendations

E 1. (ASIIN 2.1) It is recommended to offer more opportunities for students to increase their specific geographical English language skills.

E 2. (ASIIN 2.1) It is recommended to increase the preparation of the students and their support for academic mobility.

E 3. (ASIIN 2.3) It is recommended to increase project oriented learning

E 4. (ASIIN 4.3) It is recommended to offer more opportunities for the students to get familiar with GIS applications and to modernize computer equipment in order to run mod-ern GIS software in all computer pools which are in use for the programmes.

E 5. (ASIIN 4.3) It is recommended to offer more workplaces for the individual work of the students

E 6. (ASIIN 4.3) It is recommended to finance licences for actual GIS software in the quantity needed for the in house education of the students.

E 7. (ASIIN 5.1) It is recommended to provide an adequate list of relevant literature references in the module descriptions.

I Fulfilment of Requirements (23.03.2018)

Requirements

For all degree programmes

A 1. (ASIIN 4.3) Improve access for students to international scientific texts (both books and journals) in the library.

Initial Treatment	
Peers	fulfilled Vote: unanimous Justification: The library improved the access for students to international literature by additional licences.
TC 11	fulfilled Vote: unanimous Justification: The Technical Committee followed the assessment of the peers without any changes.

A 2. (ASIIN 5.2) Provide statistical data according to the ECTS-Users‘ guide in addition to the final grade.

Initial Treatment	
Peers	fulfilled Vote: unanimous Justification: The University provide statistical data corresponding to the final grade corresponding to the ECTS Users Guide..
TC 11	fulfilled Vote: unanimous Justification: The Technical Committee followed the assessment of the peers without any changes.

For both bachelor’s degree programme

A 3. (ASIIN 1.1) Rewrite the different educational objectives/learning outcomes in a way that they describe the different academic, subject-specific and professional classification of the qualifications gained in both degree programmes.

Initial Treatment	
Peers	fulfilled Vote: unanimous Justification: The University defined new objectives which describe the different academic, subject-specific and professional classification of the qualifications
TC 11	fulfilled Vote: unanimous Justification: The Technical Committee followed the assessment of the peers without any changes.

For the pedagogical Bachelor

A 4. (ASIIN 1.1, 1.3) Ensure that all graduates get adequate didactical competences.

Initial Treatment	
Peers	fulfilled Vote: unanimous Justification: The University add additional courses regarding didactical themes and implemented didactical aspects in different field specific modules.
TC 11	fulfilled Vote: unanimous Justification: The Technical Committee followed the assessment of the peers without any changes.

For the master programme

A 5. (ASIIN 3) Ensure that all students prepare their final theses according to modern scientific principles (for example by defining requirements for the final theses).

Initial Treatment	
Peers	fulfilled Vote: unanimous Justification: The University defined a student guide with regulations for the preparation of the final thesis.
TC 11	fulfilled Vote: unanimous Justification: The Technical Committee followed the assessment of the peers without any changes.

Decision of the Accreditation Commission on 23.03.2018:

Degree programme	ASIIN-label	Subject-specific label	Accreditation until max.
Ba Geography	All requirements fulfilled	--	30.09.2023
Ma Geography	All requirements fulfilled	--	30.09.2023
Ba Geography (pedagogical)	All requirements fulfilled	--	30.09.2023

Appendix: Programme Learning Outcomes and Curricula

According to the diploma supplement the following **objectives** and **learning outcomes (intended qualifications profile)** shall be achieved by the educational bachelor's degree programme in geography:

GENERIC

- The basic laws of nature and society;
- The impact of human activity on the environment;
- Principles of conservation and environmental management;
- A geographic monitoring;
- Detecting and diagnosing problems of nature protection and systems of interaction between society and nature;
- For the type of environmental protection measures;
- Development of practical recommendations for the conservation of the natural environment;
- Understanding of the specifics of the geographical bases of urban policy and the regulation of urban development;
- The organization of training and educational work in middle and secondary schools;

- Have the skills of modern information technologies;

SUBJECT SPECIFIC

- Know the modern techniques and technologies of organization and implementation of the educational process at the various educational levels and in different educational institutions;
- Know the basic concepts, terms and categories of geography;
- The structure, age and origin of the relief;
- The basic laws of radiation and thermal regime of the earth's atmosphere;
- The structure of the water bodies of the world, the laws of their formation and transformation of river runoff;

- The most important zonal and regional peculiarities of the fauna and flora of the world;
- Nature of soil formation, soil classification and geographic patterns of distribution of the main soil types;
- The basic concepts and theories of economic, social and political geography;
- Geographic patterns of development and deployment of the territorial socio-economic systems;
- Demographic, social and economic trends of the modern world community;
- Know the laws of evolution, reproduction and territorial organization of the population,
- Formation of spatial patterns of economic structures and territorial forms of organization of society on a local, regional, national and global levels.

PROGRAM LEARNING OUTCOMES

The graduate can demonstrate:

- Knowledge of modern techniques and technologies of organization and implementation of the educational process at the various educational levels and in different educational institutions;
- Assess the impact of relief on the economic activity of the person and his health;
- Perform climatologically analysis of meteorological data;
- To evaluate the components of the water balance, make the necessary hydrometric measurements;
- Perform authoring thematic maps to navigate the modern cartographic funds and extract from them the necessary information;
- Identify and analyze current demographic, ethnic and geopolitical problems;
- Analyze the geographic specificity of local, regional and global issues of our time;
- Apply the knowledge and skills to use laboratory equipment for practical, methodical and information retrieval tasks.
- Analysis of the private and common problems of natural conditions and resources and environmental management;
- Ecological safety of the national economy and other spheres of human activity;
- The organization of educational process in a comprehensive school and secondary vocational schools.

Physical geography, geomorphology and geoecology track:

- Know the theoretical foundations of landscape, the basic terms and definitions of landscape; landscape place in the general system of the natural sciences;

- Define impact of natural components on the properties and functioning of geosystems;
- Using and knowing basic theoretical and methodological principles of modern land reclamation;
- according to the geological and structural features of a region to select the most effective methods of neotectonic studies (geological, geomorphological, geophysical, remote sensing, etc.);
- Dedicated latest tectonic structures, their spatial arrangement, the amplitude of the horizontal and vertical movements, both positive and negative patterns in map form with the appropriate symbols.

Economic, social and political geography track:

- Fundamentals of state management of transport complex of the country, and transport and communication services;
- Analyze the systemic approach as a methodological basis of socio-economic geography;
- Choose appropriate assessment methods and can evaluate the causes and consequences of economic and geographical processes and phenomena;
- The development of the political geography of the world, the geopolitical consequences of the collapse of the USSR in Kazakhstan, especially the modern national borders of Kazakhstan.

Natural using and landscape design track:

- Theoretical basis, terms and definitions of environmental economics; the place and role of natural resources in the economy of the state;
- Know the macro-meso microfoundations and principles of nature; natural-resource potential of the Republic of Kazakhstan;
- Analyze global problems of natural resources and their solutions; economic mechanisms of nature (economic evaluation of natural resources, payments for natural resources, and others.);
- The state of the use of different types of natural resources of the Republic of Kazakhstan.

The following **curriculum** is presented:

1st Semester											
a/a	Courses	Teachinghours					Workload				
		Theory	Practice - Exercises	Laboratory	Total	Totalin weeks	Theory	Practice - Exercises	Laboratory	Total	ECTS
	Corecourses										
1.	History of Kazakhstan (State Examination) - State Compulsory Module	2	1	0	3	15	2	1			3
2.	Kazakh(Russian) Language for Professional Purposes - State Compulsory Module	0	3	0	3	15	0	3			3
3.	Foreign Language for Professional Purposes - State Compulsory Module	0	2	1	3	15	0	2	1		3
4.	Information Communication Technology - Natural Sciences (STEM) module	1	1	1	3	15	2	1	1		4
5.	Concepts of modern natural science - Natural Sciences (STEM) module	1	2	0	3	15	2	2	0		4
6.	Earth science - Basic Professional Modules:	2	1	0	3	15	6	0	1		7
											24
	2nd Semester										
a/a	Courses	Teachinghours					Workload				
		Theory	Practice - Exercises	Laboratory	Total	Totalin weeks	Theory	Practice - Exercises	Laboratory	Total	ECTS
1.	Engineering and computer graphics - STEM	1	0	1	2	15	2	0	1		3
2.	Introduction to pedagogical profession - Basic Professional Modules	1	0	1	2	15	3	0	1		4
3.	Basisof economic, social and political geography - Basic Professional Modules	2	0	1	3	15	6	0	1		7
4.	Theory and methods of educational work - Basic Professional Modules	2	0	1	3	15	6	0	1		7

5.	Self – cognition - Basic Professional Modules	1	1	0	2	15	3	1	0		4
6.	Soil geography - Basic Professional Modules	2	0	1	3	15	6	0	1		7
	Educational practice	4					2				2
											34
	3rd Semester										
a/a	Courses	Teachinghours					Workload				
		Theory	Practice	Laboratory	Total	Totalin weeks	Theory	Practice - Exercise	Laboratory	Total	ECTS
1.	Safety of human life - Basic Professional Modules	1	1	0	2	15	3	1	0		4
2.	Ecology and sustainable development- Basic Professional Modules	1	1	0	2	15	3	1	0		4
3.	Pedagogies - Basic Professional Modules	1	1	0	2	15	3	1	0		4
4.	Age physiology and school hygiene - Basic	1	1	0	2	15	3	1	0		4
5.	The theory and methodology geographical science- Basic Professional Modules	1	1	0	2	15	3	1	0		4
6.	BasicsofGeology- Basic Professional Modules	2	0	1	3	15	6	0	1		7
7.	Basicsof industrial production- Basic Professional Modules	2	0	1	3	15	6	0	1		7
											34
4th Semester											
a/a	Courses	Teachinghours					Workload				
		Theory	Practice	Laboratory	Total	Totalin weeks	Theory	Practice - Exercise	Laboratory	Total	ECTS
1.	Philosophy of scientific cognition – State Compulsory Module	1	0	1	2	15	1	0	1		2
2.	Ethno pedagogies - Basic Professional Modules	1	1	0	2	15	3	1	0		4
3.	Basicsoflandscape - Basic Professional Modules	1	1	0	2	15	3	1	0		4
4.	Introductiontogeomorphology- Basic Professional Modules	1	1	0	2	15	3	1	0		4

5.	GIS in geographic research - Basic Professional Modules	1	1	0	2	15	3	1	0		4
6..	Physical geography of the Republic of Kazakhstan - Basic Professional Modules	1	1	0	2	15	3	1	0		4
7.	Geography of population and with basics of demography - Basic Professional Modules	1	1	0	2	15	3	1	0		4
8.	PracticeTraining	60 hours					2				2
											28
5thSemester											
a/a	Courses	Teachinghours					Workload				
		Theory	Practice	Laboratory	Total	Totalin weeks	Theory	Practice - Exerci-	Laboratory	Total	ECTS
1.	Economic, social and political geography of the Republic of Kazakhstan - Basic Profes-	1	1	0	2	15	3	1	0		4
2.	Physical geography of physical geography continents and oceans- Basic Professional	1	1	0	2	15	3	1	0		4
3.	Economic, social and political geography of the world- Basic Professional Modules	1	1	0	2	15	3	1	0		4
4.	Economic-geographic assessment of natural resources - Basic Professional Modules	1	2	0	3	15	3	2	0		5
5.	2B325 Meliorative geography/2B334 Geography of agricultural complex	1	2	0	3	15	3	2	0		5
6.	2B115 Modern Problems of Hydrometeorology/ 2B120 Hydrometeorological Monitoring- Modules for Individual Educational Trajectories deposits	1	2	0	3	15	3	2	0		5
											27
6thSemester											
a/a	Courses	Teachinghours					Workload				
		Theory	Practice	Laboratory	Total	Totalin weeks	Theory	Practice - Exerci-	Laboratory	Total	ECTS
1.	Methods of teaching Geography- Basic Professional Modules	1	1	0	2	15	3	1	0		4
2.	2B324 Biogeography a2B333 Geography of transport and communication and with basics of ecology- Modules for Individual	1	1	0	2	15	3	1	0		4

3.	2B116 Environmental education andculture/2B121 Systemof environmental education- Modules for Individual Educational Trajectories deposits	1	1	0	2	15	3	1	0		4
4.	2B326Neotectonics/ 2B335Political geography with basics of geopolitics - Modules for Individual Educational Trajectories	1	0	1	2	15	3	0	1		4
5.	2B332 Regional problems of rational nature management and protection of the landscape/2B341 Recreational geography of the world- Modules for Individual Educational Trajectories deposits	1	0	1	2	15	3	0	1		4
6.	2B328Geochemistry of landscape/ 2B337Human development and quality of life - Modules for Individual Educational	2	0	1	3	15	6	0	1		7
7.	New information technologies in geography- Interdisciplinary module	1	1	0	2	15	2	1	0		3
	Innovative methods of teaching of geography- Interdisciplinary module geography	1	1	0	2	15	2	1	0		3
9.	PracticeTraining	150 hours					5				5
											38
7thSemester											
a/a	Courses	Teachinghours					Workload				
		Theory	Practice	Laboratory	Total	Totalin weeks	Theory	Practice - Exercise	Laboratory	Total	ECTS
1.	2B323 Scientific writing (kaz/rus/eng) - Modules for Individual Educational Trajectories deposits	0	1	0	3	15	0	1	0		1
2.	2B114 Study of a particular region /2B119 Geography of services sector- Modules for Individual Educational	1	1	0	2	15	3	1	0		4
3.	2B327 Quaternary geology/2B336 Economic and social geography of the CIS countries- Modules for Individual Educational	1	0	2	3	15	3	0	2		5

4.	2B329Geophysics of landscape/2B338Socio-geographic researches - Modules for I-Modules for Individual Educational Trajectories deposits ndividual Educational	1	1	0	2	15	3	1	0		4
5.	2B117 Geoecology Kazakhstan /2B339Geography of cities and with basics of geo-urbanities- Modules for Individual Educational Trajectories deposits	1	0	2	3	15	3	0	2		5
6.	2B330Environmentaldesignandexpertise/ 2B340Territorial management and planning-Modules for Individual Educational Trajectories deposits	1	0	2	3	15	3	0	2		5
	2B118 Technology teaching of physical geography / 2B122 Technology of teaching economic and social geography- Modules for Individual Educational Trajectories deposits	1	1	0	3	15	3	1	0		4
											28

8thSemester			
a/a	Internships	Allocatedhours	ECTS Workload
2	Industry Internship	240 hours	8
3	Pre-diploma Research Internship	210 hours	7
	Preparation and Presentation ofBachelor's Dissertation (Diploma Project)	360 hours	12
			27
	Overall internship workload		
a/a	Internship	Allocatedhours	ECTS Workload
1	Educational Practice	60 hours	2
2	Industry Internship	450 hours	15
3	Pre-diploma Research Internship	210 hours	7

4	Preparation and Presentation ofBachelor's Dissertation (Diploma Project)	360 hours					12				
											204/36
5	Additional type of practice: Sport and Physical training										

According to the diploma supplementt the following **objectives** and **learning outcomes** shall be achieved by the Bachelor's degree programme in geography

[…]

The following **curriculum** is presented:

GENERIC
- The basic laws of nature and society;
- The impact of human activity on the environment;
- Principles of conservation and environmental management;
- A geographic monitoring;
- Detecting and diagnosing problems of nature protection and systems of interaction between society and nature;
- For the type of environmental protection measures;
- Development of practical recommendations for the conservation of the natural environment;
- Understanding of the specifics of the geographical bases of urban policy and the regulation of urban development;
- The organization of training and educational work in middle and secondary schools;
- Have the skills of modern information technologies;

SUBJECT SPECIFIC

- Know the basic concepts, terms and categories of geography;

- The structure, age and origin of the relief;
- The basic laws of radiation and thermal regime of the earth's atmosphere;
- The structure of the water bodies of the world, the laws of their formation and transformation of river runoff;
- The most important zonal and regional peculiarities of the fauna and flora of the world;
- Nature of soil formation, soil classification and geographic patterns of distribution of the main soil types;
- The basic concepts and theories of economic, social and political geography;
- Geographic patterns of development and deployment of the territorial socio-economic systems;
- Demographic, social and economic trends of the modern world community;
- Know the laws of evolution, reproduction and territorial organization of the population,
- Formation of spatial patterns of economic structures and territorial forms of organization of society on a local, regional, national and global levels.

PROGRAM LEARNING OUTCOMES

The graduate can demonstrate:

- Assess the impact of relief on the economic activity of the person and his health;
- Perform climatologically analysis of meteorological data;
- To evaluate the components of the water balance, make the necessary hydrometric measurements;
- Perform authoring thematic maps to navigate the modern cartographic funds and extract from them the necessary information;
- Identify and analyze current demographic, ethnic and geopolitical problems;
- Analyze the geographic specificity of local, regional and global issues of our time;
- Apply the knowledge and skills to use laboratory equipment for practical, methodical and information retrieval tasks.
- Analysis of the private and common problems of natural conditions and resources and environmental management;
- Ecological safety of the national economy and other spheres of human activity;
- The organization of educational process in a comprehensive school and secondary vocational schools.

Physical geography, geomorphology and geo-ecology track:

- Know the theoretical foundations of landscape, the basic terms and definitions of landscape; landscape place in the general system of the natural sciences;

- Define impact of natural components on the properties and functioning of geo-systems;
- Using and knowing basic theoretical and methodological principles of modern land reclamation;
- According to the geological and structural features of a region to select the most effective methods of neo-tectonic studies (geological, geomorphological, geophysical, remote sensing, etc.);
- Dedicated latest tectonic structures, their spatial arrangement, the amplitude of the horizontal and vertical movements, both positive and negative patterns in map form with the appropriate symbols.

Economic, social and political geography track:

- Fundamentals of state management of transport complex of the country, and transport and communication services;
- Analyze the systemic approach as a methodological basis of socio-economic geography;
- Choose appropriate assessment methods and can evaluate the causes and consequences of economic and geographical processes and phenomena;
- The development of the political geography of the world, the geopolitical consequences of the collapse of the USSR in Kazakhstan, especially the modern national borders of Kazakhstan.

Natural using and landscape design track:

- Theoretical basis, terms and definitions of environmental economics; the place and role of natural resources in the economy of the state;
- Know the macro-meso microfoundations and principles of nature; natural-resource potential of the Republic of Kazakhstan;
- Analyze global problems of natural resources and their solutions; economic mechanisms of nature (economic evaluation of natural resources, payments for natural resources, and others.);
- The state of the use of different types of natural resources of the Republic of Kazakhstan.

The following **curriculum** is presented:

1st Semester								
a/a	Courses	Teachinghours		Workload				

		The-ory	Prac-tice - Exerci-	Labo-ratory	Total	Totalin weeks	Theory	Practice - Exerci-ses	Labora-tory	Total	ECTS
	Corecourses										
1.	History of Kazakhstan (State Examination) - State Compulsory Module	2	1	0	3	15	2	1			3
2.	Kazakh(Russian) Language for Professional Purposes - State Compulsory Module	0	3	0	3	15	0	3			3
3.	Foreign Language for Professional Purposes - State Compulsory Module	0	2	1	3	15	0	2	1		3
4.	Information Communication Technology - Natural Sciences (STEM) module	1	1	1	3	15	2	1	1		4
5.	Mathematical methods in geography - Natural Sciences (STEM) module	1	2	0	3	15	2	0	2		4
6.	General earth science - Natural Sciences (STEM) module	2	0	1	3	15	4	0	1		5
											22
	2nd Semester										
a/a	Courses	Teachinghours					Workload				
		The-ory	Prac-tice - Exerci-	Labo-ratory	Total	To-talin-weeks	Theory	Practice - Exerci-ses	Labora-tory	Total	ECTS
1.	Economic, social and political geography of the world- Natural Sciences (STEM) module	2	0	1	3	15	4	0	1		5
2.	Soil Science - Basic Professional Modules	1	0	2	3	15	3	0	2		5
3.	General hydrology - Basic Professional Modules	1	0	2	3	15	3	0	2		5
4.	Technical and economic bases of production - Basic Professional Modules	1	0	2	3	15	3	0	2		5
5.	Topography with basics of geodesy - Basic Professional Modules	1	0	2	3	15	3	0	2		5
6.	Quantitative methods in geographical research -	1	0	2	3	15	3	0	2		5
7	Educational practice	4					2				2

											32
	3rd Semester										
a/a	Courses	Teachinghours					Workload				
		The-ory	Prac-tice	Labo-ratory	Total	Totalin weeks	Theory	Practice - Exerci-	Labora-tory	Total	ECTS
1.	Safetyofhumanlife- Basic Professional Modules	1	1	0	2	15	3	1	0		4
2.	Ecologyandsustainabledevelopment- Basic Professional Modules	1	1	0	2	15	3	1	0		4
3.	Geology- Basic Professional Modules	1	0	2	3	15	3	0	2		5
4.	General meteorology- Basic Professional Mod-	1	0	2	3	15	3	0	2		5
5.	Theoretical bases of Social and Economic Geography- Basic Professional Modules	1	0	2	3	15	3	0	2		5
6.	Economic, social and political geography of the world- Basic Professional Modules	1	0	2	3	15	3	0	2		5
7.	Geography of population and with basics of demography- Basic Professional Modules	1	0	2	3	15	3	0	2		5
											33
4th Semester											
a/a	Courses	Teachinghours					Workload				
		The-ory	Prac-tice	Labo-ratory	Total	Totalin weeks	Theory	Practice - Exerci-	Labora-tory	Total	ECTS
1.	Philosophy of scientific cognition- Basic Professional Modules	1	0	2	3	15	3	0	2		5
2.	Geomorphology- Basic Professional Modules	1	0	2	3	15	3	0	2		5
3.	Cartography- Basic Professional Modules	1	0	2	3	15	3	0	2		5
4.	Photogram metrics and remote sensing in geography- Basic Professional Modules	1	0	2	3	15	3	0	2		5
5.	Economic, social and political geography of the world- Basic Professional Modules	1	0	2	3	15	3	0	2		5
6..	Landscape study- Basic Professional Modules	1	0	2	3	15	3	0	2		5
7.	Physical geography of physical geography continents and oceans- Basic Professional	1	0	2	3	15	3	0	2		5

8.	PracticeTraining	60 hours					2				2
											37
5thSemester											
a/a	Courses	Teachinghours					Workload				
		The-ory	Prac-tice	Labo--ratory	Total	Totalin weeks	Theory	Practice - Exerci-	Labora-tory	Total	ECTS
1.	Geographic bases of management of natural using- Basic Professional Modules	1	0	2	3	15	3	0	2		5
2.	Basics of monitoring of environment- Basic Professional Modules	1	0	2	3	15	3	0	2		5
3.	Economic, social and political geography of the Republic of Kazakhstan- Basic Profes-sional Modules	1	0	2	3	15	3	0	2		5
4.	Physical geography of the Republic of Ka-zakhstan - Basic Professional Modules	1	0	2	3	15	3	0	2		5
5.	Physical geography of physical geography continents and oceans part - Basic Profes-sional Modules	1	0	2	3	15	3	0	2		5
6.	2B324 Biogeography and with basics of ecol-ogy/2B333 Geography of transport and com-	1	0	2	3	15	3	0	2		5
											30
6thSemester											
a/a	Courses	Teachinghours					Workload				
		The-ory	Prac-tice	Labo--ratory	Total	Totalin weeks	Theory	Practice - Exerci-	Labora-tory	Total	ECTS
1.	Geography of Kazakhstan	1	0	2	3	15	3	0	2		5
2.	2B325Meliorative geography/2B334Geogra-phy of agricultural complex/2B343Econom-ics of natural using- Modules for Individual Educational Trajectories	1	0	2	3	15	3	0	2		5
3.	2B326Neotectonics/ 2B335Political geogra-phy with basics of geopolitics/ 2B344Problems of natural using in foreign countries- Modules for Individual	1	0	2	3	15	3	0	2		5

4.	2B327Quaternary geology/ 2B336 Economic and social geography of the CIS countries/ 2B345Economic assessment of mineral - Modules for Individual Educational Trajectories deposits	1	0	2	3	15	3	0	2		5
5.	New information technologies in geography- Interdisciplinary module	1	0	1	2	15	2	0	1		3
6.	Innovative methods of teaching of geography- Interdisciplinary module geography	1	0	1	2	15	2	0	1		3
7	PracticeTraining	150 hours					5				5
											31
7thSemester											
a/a	Courses	Teachinghours					Workload				
		Theory	Practice	Laboratory	Total	Totalin weeks	Theory	Practice - Exercise	Laboratory	Total	ECTS
1.	2B323 Scientific writing (kaz/rus/eng) - Modules for Individual Educational Trajectories deposits	0	1	0	3	15	0	1	0		1
2.	2B329Geophysics of landscape/2B338Socio-geographic researches/2B347Landscape Planning- Modules for I- Modules for Individual Educational Trajectories deposits	2	0	1	3	15	6	0	1		7
3.	2B330 Environmental design and expertise/2B339Geography of cities and with basics of geo-urbanities/2B348 Environmental planning and economic activity- Modules for Individual Educational Trajectories deposits	2	0	1	3	15	6	0	1		7
4.	2B331 General glacial science/ 2B340Territorial management and planning/ 2B349Landscape architecture and design- Modules for Individual Educational Trajectories deposits	2	0	1	3	15	6	0	1		7

5.	2B332Regional problems of rational nature management and protection of the landscape/2B341 Recreational geography of the world/ 2B350Computer graphics in landscape design- Modules for Individual Educational Trajectories deposits	2	0	1	3	15	6	0	1		7
											29
8thSemester											
a/a	Internships	Allocatedhours					ECTS Workload				
2	Industry Internship	240 hours					8				
3	Pre-diploma Research Internship	210 hours					7				
	Preparation and Presentation of Bachelor's Dissertation (Diploma Project)	360 hours					12				
							27				
	Overall internship workload										
a/a	Internship	Allocatedhours					ECTS Workload				
1	Educational Practice	60 hours					2				
2	Industry Internship	450 hours					15				
3	Pre-diploma Research Internship	210 hours					7				
4	Preparation and Presentation ofBachelor's Dissertation (Diploma Project)	360 hours					12				
											204/36
5	Additional type of practice: Sport and Physical training										

According to the diploma supplement the following **objectives** and **learning outcomes** shall be achieved by the Master's degree programme in geography:

GENERIC

- Knowledge in the basics of natural and social-economic sciences, the ability to analyze socially significant problems and processes, the ability to use the methods of these sciences in various kinds of professional geographic activities.
- Knowledge of the state of development of geographic science, the methods and means of measurements, calculations and forecasts of hydrological characteristics in Kazakhstan, CIS and foreign countries, as well as modern methodology and pedagogy of higher education.
- The ability to take into account scientific and practical geographical activities the general laws of nature and society, possession of cognitive abilities, knowledge of the culture of thinking and ability in written and oral form is logical to draw the results of their research work.
- Understanding the contemporary problems of Kazakhstan geography, basic problems of its large reservoirs, major water management issues, patterns of pollution of natural waters and the ability to assess the impact of economic activity on the regime of water bodies.
- The ability to uncover the essence of natural science geographical problems, conduct their qualitative and quantitative analysis using the latest information - communication technologies.

SUBJECT SPECIFIC

- Understanding the impacts of natural resources on society and the environment as a whole, the availability of products on the use of geo-information in various fields of economic activities of the state;
- Understanding the purpose, methodology and techniques of professional activity geographer, possession of methods of studying the relationship of social and natural phenomena;
- The ability to apply appropriate mathematical and numerical methods for modeling of geographical processes;
- Conducting of the methods of compilation of geographical forecasts, determination of environmental pollution of the geographic calculations and analysis of the results.

PROGRAM LEARNING OUTCOMES

The graduate can demonstrate:

- Identifying of methods, tools and technologies used for observations and research;
- Subsuming knowledge systems results, allowing critically evaluate current research and theory in the geography field;
- Clarifying basics of labor law and copyrights science worker.

- To take responsibility for own decisions within the framework of professional competence;
- Conduct economic geographical and physical geography forecasting applied to solve specific problems of certain territory;
- Understand the role of science in the development of civilization, to determine the relation of science and technology and related issues;
- Apply mapping and remote sensing methods in geographical research;
- To generate knowledge of the system and a critical assessment of the current problems that are studied and discussed in a geographic study of sustainable development;
- To generate comprehensive understanding of the methods used to study the geo-environmental condition of the environment;
- To generate ability to carry out independent scientific research and expertise in formulating their own opinions;
- To form the principles of learning and teaching methods of geographical research to address spatial problems;
- To generate capacity to contribute to the development of new areas of geographical science through original research;
- To generate the ability to develop, conceptualize and implement projects to create new knowledge, having substantial scientific value;

Economical, social and political geography track:

- identify issues of nature protection and systems of interaction between society and nature.
- using of modern information technologies including geographic information systems (GIS) methods
- formation of spatial patterns of economic structures and territorial forms of organization of society on a local, regional, national and global levels;
- Analyze the new concepts and theories of social-economical geography and development;
- Analyze the situation of regional economic development around the world and compare and using it in the sample of Kazakhstan;

Physical Geography and Geomorphology track:

- Knowing the fundamental research of physical geography and geomorphology to know and predict some natural disasters and to give forecasting of economic development and land use;
- Define the modern impact of anthropogenic factor's assessment to the environment by using data and GIS technologies;
- provide a work of evironmental monitoring of the Republic of Kazakhstan and give an assessment the glacial mass balance system in the country;
- Mapping of natural and natural-anthropogenic geosystems;

Geoinformatics track:

- Knowing the basics steps of using GIS in scientific work;

- Analyze Geographical Information Data;
- Forecasting and assessment conditions of the natural and economic systems and define the impact of activities assessment to the environment;
- Using new the new way of using Open Source GIS and Spatial Data Analysis;
- Analyze and synthesize the data of environmental changes by using aero and space imagery

The following **curriculum** is presented:

1st Semester											
a/a	Courses	Teachinghours					Workload				
		The-ory	Prac-tice - Exer-	Labo-ratory	Total	Totalin weeks	The-ory	Practice - Exercises	Labo-ratory	Total	ECTS
	Corecourses										
1.	History and Philosophy of Science - Compulsory State Modules	1	1	0	3	15	2	1	0		3
2.	Foreign language (Professional) - Compulsory State Modules	0	2	0	3	15	0	2	0		2
3.	Organization and planning of research projects - Compulsory State Modules	2	1	0	3	15	4	1	0		5
4.	Geography of population and labour resources of the Republic of Kazakhstan - Compulsory State Modules	2	1	0	3	15	4	1	0		5
5.	Management of scientific projects	2	1	0	3	15	6	1	0		7
6.	Actual problems of economic, social and political geography	1	1	0	2	15	3	1	0		4
	Research Seminar I	120 hours					3				3
											29
	2nd Semester										
a/a	Courses	Teachinghours					Workload				

	Modules of Individual Educational Paths	The-ory	Prac-tice - Exer-	Labo-ratory	Total	To-talin-weeks	The-ory	Practice - Exercises	Labo-ratory	Total	ECTS
1.	Pedagogics - Compulsory State Modules	1	1	0	2	15	2	1	0		3
2.	Psychology - Compulsory State Modules	1	1	0	2	15	2	1	0		3
3.	Geospatial Environmental Management	1	1	0	2	15	3	1	0		4
4.	Theoretical and methodological problems of geography/ Theoretical and methodological problems of physical geography and geomorphology/ Introduction to Geo-graphic Information System and Science (eng.)/ Founda-tion of Sustainable Development (jointly with CU) - Modules of Individual Educational Paths - Modules of Individual Educational Paths	1	1	0	2	15	3	1	0		4
5.	Modern trends of regional development of the Kazakh-stan/ Modern theory and practice of assessment the im-pact of anthropogenic factors on the environment/ Asqui-sition and integration of the data (eng.)/ International or-ganizations and the policy of sustainable development - Modules of Individual Educational Paths	1	1	0	2	15	3	1	0		4
6.	Models in geography/ Basics of glaciology and glacial mass balance system/ Spatial analysis (english)/ Envi-ronmental Data Analysis - Modules of Individual Educational Paths	1	1	0	2	15	3	1	0		4
8	Research Internship 1	60 hours				2					2
9	Research Seminar II	120 hours				3					3
											32
	3rd Semester										
a/a	Courses	Teachinghours					Workload				

		Theory	Practice - Exercises	Laboratory	Total	Totalin weeks	Theory	Practice - Exercises	Laboratory	Total	ECTS
1.	Geoinformation systems in economic and social geography/ GIS technologies in the physical geography research spatial/ Open source GIS and distributed Architecture Database(engl.)/ Leadership - Modules of Individual Educational Paths	2	1	0	2	15	6	1	0		7
2.	Spatial statistical analysis/ Mapping of natural and natural-anthropogenic geosystems/ Cartography and geovisualization (eng.)/ Innovative Management and Planning for Green Economy - Modules of Individual Educational Paths	2	1	0	2	15	6	1	0		7
3.	Innovative technology of teaching geography/ Innovative methods of teaching geography/ Innovative technology of teaching geography (eng.)/ Water resources and Adaptation to Climate Change - Modules of Individual Educational Paths	2	1	0	3	15	6	1	0		7
4.	Economic and environmental assessment of mineral - crude resources/ Spatial-temporal organization of landscapes/ Remote sensing (eng.)/ Urban Development - Modules of Individual Educational Paths	2	1	0	3	15	6	1	0		7
											28
4th Semester											

a/a	Internships	Allocatedhours	ECTS Workload
2	Research practice 2	2	2
3	Research Seminar I	1	7
	Complex Examination	1	12
	Dissertation Preparation and Defence	3	
			27

	Overall internship workload										
a/a	Internship	Allocatedhours					ECTS Workload				
1	Educational Practice	60 hours					2				
2	Industry Internship	450 hours					15				
3	Pre-diploma Research Internship	210 hours					7				
4	Preparation and Presentation ofBachelor's Dissertation (Diploma Project)	360 hours					12				
											84/36
5	Additional type of practice: Sport and Physical training										