

Expert group joint opinion

Evaluation Procedure: Assessment of Study Field

Higher Education Institution: University of Latvia

Study field: Geography and Earth Sciences

Experts:

1. Armands Celms (Chair of the Experts Group)
2. Martina Jakovčić (Secretary of the Experts Group)
3. Dovilē Krupickaitē
4. Artūrs Čerņiševs (Student Union of Latvia)
5. Andrejs Veliks (Employers' Confederation of Latvia)

Summary of the Assessment of the Study Field and the Relevant Study Programmes

Summary of the Assessment of the Study Field and the Relevant Study Programmes

Re-accreditation visit to the University of Latvia, Faculty of Geography and Earth Sciences was conducted on the 26th and 27th of October 2022. Four experts visited the Faculty in person, while one expert conducted an online visit. The visit comprised a set of interviews and a tour of the premises of the Faculty, laboratories, and library. Interviews were conducted with the Faculty of Geography and Earth Sciences management (vice-rector and the Dean of the Faculty of Geography and Earth Sciences), members of the group responsible for the preparation of the self-assessment report, director of the study field and directors of the study programmes, academic staff, students of the first and the second cycle, employers and graduates.

The University of Latvia has acknowledged previous recommendations and is implementing them to improve the study field and study programmes. There are some deficiencies, but UL has addressed them and is still improving.

The aims of the study field are clearly defined, reasonable and attainable, formulated in accordance with the Strategic goals of the University of Latvia. The interconnection of the study programs included in the study field is clear and logical. The goals of the study programs are not directly related to the goals of the study field but correspond to them. The study system is organized according to the international agreements, national law, and documentation of the University of Latvia. Management of the study programs is functioning efficiently, and the professional quality of the graduates meets the needs of the labour market.

Faculty and the University have established quality assurance protocols and have developed a hierarchy of Quality Policies and Action Policies.

Financing of study fields, programmes, and teaching staff is conducted based on relevant documents. Teachers have financial support available for different scientific activities. The infrastructural resources include the new building of the Faculty of Geography and Earth Sciences with a sufficient number of classrooms, study laboratories and research laboratories. Laboratories are well equipped. All laboratories are freely accessible to students Library is well-equipped with both offline and online resources. The faculty of Geography and Earth Sciences is well equipped with modern information and communication technologies including free onsite and remote access to databases and statistical and cartographic programmes and material. Students and researchers have access to relevant software i.e. SPSS, MatLab, ESRI ArcGIS etc. Open source e-learning environment MOODLE is well used and commonly accepted.

The recruitment and selection of academic staff are regulated by the Regulatory enactments on academic and administrative positions at the University of Latvia. However, the document is available only in Latvian and therefore the application of foreign teachers is not easy. The Faculty of Geography and Earth Sciences has a balanced structure of teaching and scientific staff in terms of experience, qualification and seniority. The importance of personal development in both academic and research careers is well recognised in Development Strategy 2022-2027.

Students at the Faculty of Geography and Earth Sciences and University have access to academic support, career development support and psychological support.

There is good communication between all stakeholders in the development and conduct of study programmes. This was emphasized several times during the interviews. Also, there is good communication between teachers and students.

As for the study programmes in general goals of all programmes are in line with the goals of the study field. Study programmes in Geology and Geography are being developed taking into account the requirements of previous accreditation and emerging challenges. The content of the "Geoinformatics" study programme is updated and corresponds to industry trends. The program is balanced and its content fully complies with the national standard of second-level professional

higher education. The implementation mechanism of the study program has been developed and implemented in detail, in accordance with the internal laws and regulations of the state and University.

The BSP in Geography is the only programme of that kind offered in Latvia and therefore is a necessary one to obtain. The goal of the study programme is to provide students with high-quality theoretical knowledge and research skills in the field of Geography.

The BSP in Geology is the only programme of that kind offered in Latvia and therefore is a necessary one to obtain. The goal of the study programme is in line with the goal of the study field and it is to provide students with high-quality theoretical knowledge and research skills in the field of Geology.

MSP Geography is the only master's programme of that kind in Latvia and therefore its existence is needed and justified. The aims and objectives of the study programme are in line with the goal of the study programme. Learning outcomes in the sense of the knowledge, skills, and competencies are well defined and correlate with the expected results of BSP Geography.

MSP Geology is the only master's programme of that kind in Latvia and therefore its existence is needed and justified. The aims and objectives of the study programme are in line with the goal of the study programme. Learning outcomes in the sense of the knowledge, skills and competencies are well defined and correlate with the expected results of BSP Geology.

Strength:

The Faculty of Geography and Earth Science has prepared the Development Plan for the study direction, which includes results of the performed SWOT analysis of the study field.

The study field and the relevant study programs indirectly comply with the main directions of the strategic development of the higher education institution and meet the needs and the development trends of society and the national economy.

Management of the study programs is functioning efficiently, and the professional quality of the graduates meets the needs of the labour market.

Quality Assurance system of study programmes and studies is incorporated in the overall QA Policy.

Laboratories are well-equipped and accessible to both teachers and students.

The balanced structure of teaching and scientific staff in terms of experience, qualification and seniority.

Financial support for participation at scientific conferences and for covering publishing expenses.

Good level of cooperation with relevant stakeholders.

Students and graduates appreciate the cooperation between the labour market and University.

Weakness:

The goals of the study programs are not directly related to the goals of the study field.

The large rate of drop-out of students in Geography and Geology BA.

Disbalance between teaching and scientific workload results in lower participation in international long-term mobility and a reduction of scientific outputs including participating as a leader in big EU projects.

A sharp drop in the number of students enrolled in the first year of the study programme Geology.

Low level of international mobility of both teachers and students.

I - Assessment of the Study Field

I - Assessment of the Study Field

1.1 Management of the Study Field

Analysis

The aims of the study field were defined (Appendix 3 of the Self-evaluation report) according to the

Strategy of the University of Latvia 2021-2027 declared mission and vision of the University of Latvia, as well as the development directions and strategic goals of the University of Latvia. There are defined six development directions of the University of Latvia and the aims of the study field are structured according to it, focusing on the challenges to be solved at the level of the field. The challenges were defined according to a SWOT analysis, who is placed in the Self-evaluation report of the study field (p. 23-24). The goals of the study field (accordingly to the university's strategic goals) are defined into two main sections: 1) development of the main activities and 2) institutional development. The first section declared goals touching research and science, education and community of teaching staff and student development, and the second stressed the necessity to promote growth, and promotion of the teaching staff, optimization of the management of the study programs, and activation of relations with the society and they need.

Accordingly, to the goals, a Development plan for the study field is developed, and each of the study programs has its own goals and tasks declared. The goals of the study programs are not directly related to the goals of the study field but correspond to them.

It is important to stress, that the staff of the study field was involved in the development of the Strategy of the Faculty and accordingly of the Study field, and is well informed about it.

The interconnection of the study programs included in the study field (Geology, Geography, and Geoinformatics) corresponds to a traditional model, so is essentially clear and logical. It is important to stress, that Geoinformatics as BA professional study program was included since September 2021 according to the needs of the market, and complements logically the set of the study programs.

The management structure of the study field corresponds to the whole system of the management structure of the University. It is clear and logical, and in the case of the Faculty of Geography and Earth sciences is functioning efficiently, taking the possibility to develop the quality of study programs.

In terms of the results of the study programs, it was mentioned by the side of employees, that the graduates in the last years are obviously better prepared for the labour market. Demand from the labour market is high, many students are already employed according to their specialization. The technical needs of the study programs are covered in terms of the availability of equipment in auditoriums, laboratories, and other rooms, teaching and scientific literature, and other informational support. The scientific results of the staff are relatively stable (with possible fluctuations during the Covid-19 pandemic), and participation in scientific projects on the national and international levels is increasing. Students and graduates of the study programs are, according to survey results, provided in annexes, satisfied with their studies, in surveys, they evaluate the corresponding study programs as rather favourable or very favourable. Unfortunately, the number of graduates, according to data, provided in annexes, is about 1/3 of the number of admitted students in Geography and Geology BSP, and this is a serious problem of effectiveness of studies and a challenge for study field management.

The mentioned relatively good results of the management of the studies and big demand from the labour market for the graduates shows, that the organization of the studies has no essential problems.

All the study programs are compliant with the Lisbon Convention, the Bologna Declaration, and other international documents regulating higher education. The model of 3 years for BA and 2 years for MA corresponds to the labour market demand for specialists of different qualification levels. Unfortunately, this model is more related to professional, but not to academic studies, especially in the case of geography, who requires a very broad education, including different natural and social sciences.

The system for admission of students is organized according to the national law and in documents of the University of Latvia prescribed rules. Enrolment in undergraduate studies is centralized, the competition for study places is based on the results of the centralized examinations or the secondary education certificate grades of the persons who have acquired secondary education in

another way. Programs may provide benefits to the winner of National Olympiads and other contests.

Enrolment in master's degree programs is decentralized and organized at the faculty, and with uniform deadlines. The enrolment is based on grades obtained during undergraduate studies. In Geography and Geology MSP that allow for prior education in various fields, the entrance examination is used to determine the correspondence of the candidate's prior knowledge to the field of the study program, motivation, and with prior additional activities (experience in scientific research, professional activity, etc).

Information about the system is clearly provided on the websites of the University and of the Faculty.

Assessment of students' achievements according to the national law and documents of the University of Latvia is clearly formulated and included in all course descriptions, which are available for students in the university information system, including Moodle system, which is mandatorily used for each course. Learning outcomes for each study program and for each study course are formulated as a set of knowledge, skills, and competencies accordingly to the aims of the study program, and provided in each study program map. It was mentioned by the side of students and teachers, and study program directors, that students have the possibility to state their needs directly to the teacher or study program director in form of reviewing the process of the obtained assessment or participating in regular surveys of students.

Unfortunately, there still is a possibility of having different assessment criteria for the course taught by several teachers. There is no regulatory enactment in procedures for organizing study courses that state that all of the academic staff involved in the same study course must comply with the same criteria for teaching and evaluating.

To ensure academic integrity during the studies, the University of Latvia has established corresponding principles in The Academic Ethics Code of the university and mechanisms for their observance, first of all in form of a Unified Computerised Plagiarism Control System for the study's papers. Students are informed about that. According to administration representatives and teachers, in case of violation of the ethical principles, the decision is made individually on different levels, taking into account the specifics of the violation.

Conclusions on this set of criteria, by specifying strengths and weaknesses

The aims of the study field are clearly defined, reasonable and attainable, formulated in accordance with the Strategic goals of the University of Latvia. The Faculty of Geography and Earth Science detailed it in the Development Plan of the Faculty, which makes the relationship between the interests of society, the University, and the goals of each study program closer.

The interconnection of the study programs included in the study field is clear and logical. The goals of the study programs are not directly related to the goals of the study field but correspond to them. The study system is organized according to the international agreements, national law, and documentation of the University of Latvia.

Management of the study programs is functioning efficiently, and the professional quality of the graduates meets the needs of the labour market.

Strength:

The Faculty of Geography and Earth Science has prepared the Development Plan for the study direction, which includes results of the performed SWOT analysis of the study field.

The staff of the study field was involved in the development of the Strategy of the Faculty, and accordingly, the Study field is well-informed about it and seeks to act according to its goals.

The study field and the relevant study programs indirectly comply with the main directions of the strategic development of the higher education institution and meet the needs and the development

trends of society and the national economy.

A system for the admission of students, for the recognition of the study period, professional experience, prior formal and non-formal education, and for the assessment of students' achievements and learning outcomes, they are logical and effective.

Management of the study programs is functioning efficiently, and the professional quality of the graduates meets the needs of the labour market.

Weaknesses:

The goals of the study programs are not directly related to the goals of the study field.

The number of graduates is about 1/3 of the number of admitted students in Geography and Geology BA.

There is no regulatory enactment in procedures for organizing study courses that state that all of the academic staff involved in the same study course must comply with the same criteria for teaching and evaluating.

1.2. Efficiency of the Internal Quality Assurance System

Analysis

The University of Latvia (UL) published the current Quality Action Policy on February 6th 2020. The policy is available online. The Policy gives guidelines for the development of both University and its faculties. Quality Policy states the necessity for continuous improvement. Chapter III. of the Policy deals with quality management of both study fields and study programs. Policy contributes to the achievement of the aims and learning outcomes by stating the necessity for the development of diversified, student - centered offer of study programmes. Quality Assurance System for studies which includes procedures for planning, ensuring, measuring and evaluating quality in higher education which is in line with ESG standards. The policy ensures continuous improvement of study programmes by introducing necessary surveys for determining the satisfaction level of both current students and graduates, but also the level of satisfaction of employers.

The meeting with employers revealed that students are well prepared for work with a sufficient level of theoretical knowledge which confirms that the system is successful. Also, talks with students and graduates showed that they feel prepared for the market.

Programmes are accredited for a period of 6 years. The procedure for the development and implementation of the study programmes is framed by the internal legal acts of the University which define the development, implementation, review and assessment of study programs and courses. The most important documents are Regulations on the Recognition of Knowledge, Skills, and Competence Acquired Outside of Formal Education or in Professional Experience, Recognition of Study Results Achieved in the Previous Education, and Referencing of Academic Activity at the University of Latvia; Procedure for the organisation of regular surveys for the evaluation of the study process at the University of Latvia; Regulations on University of Latvia study and continuing education programmes.

The procedure involves all stakeholders which is partly confirmed through interviews with stakeholders. The stakeholders confirmed that the survey is conducted at the end of the semester and academic year and that round tables are conducted but do not confirm getting feedback on the survey results.

The mechanism developed for the submission of student complaints is not completely clear. The legal framework for submission of student complaints on enrolment is given through the document Terms of admission at the University of Latvia. According to the Self-assessment document, there is also a document titled "Procedures for the Submission and Resolution of Students' Proposals and Complaints. However, the document dates back to 2002 and it is not available on the Faculty

website.

According to the Self-assessment report, there is also a document titled "Procedure for Discontinuing Studies at the University of Latvia which provides for the right to appeal against decisions refusing to grant a study break. However, the document is 14 years old and is not available online in English.

Statistical data are collected in the Annual yearly report by the UL and are published on the website in Latvian and in English. However last available report is from 2020. Student surveys on the quality of the courses and study programmes are conducted every semester. Surveys are conducted at the beginning of the studies. An electronic survey is conducted on every study course. Data are available to teachers, programme directors, and the Dean. Surveys are also conducted at the end of the study programme.

Strong centralization of the information. The majority of the documents are uploaded in the English version of the UL website. Some documents such as the Strategy of the Faculty are not available on the website.

Conclusions on this set of criteria, by specifying strengths and weaknesses

Faculty and the University have established quality assurance protocols and have developed a hierarchy of Quality Policies and Action Policies. However, the mechanisms for submitting students' complaints and suggestions are not completely clear. It is clear that surveys are conducted regularly every semester. But, it is not clear how is the feedback communicated with the students and other stakeholders. Also, it is not clearly defined, or at least information is not easily found on how to file a complaint during the semester. Not all information is available on the website.

Strength:

Quality Assurance system of study programmes and studies is incorporated in the overall QA Policy. According to opinions expressed at the meetings with students, teachers and employees, the quality assurance system is working in an informal way too (through direct comments or expressed needs). The faculty has developed its own strategy for the forthcoming period.

Weakness:

The procedure for the contribution of each group of stakeholders in the development of every study programme is not clearly explained and is not clear to all stakeholders.

Not all the information, provided on the website of the LU and of the Faculty Latvian is provided in English and this makes it more complicated the attraction of students, who are interested in studying in English.

Assessment of the requirement [1]

- 1 R1 - Pursuant to Section 5, Paragraph 2.1 of the Law on Higher Education Institutions, the higher education institution/ college shall ensure continuous improvement, development, and efficient performance of the study field whilst implementing its internal quality assurance system:

Assessment of compliance: Fully compliant

All the subcriteria are fully compliant

- 2 1.1 - The higher education institution/ college has established a policy and procedures for assuring the quality of higher education.

Assessment of compliance: Fully compliant

The HEI has developed the Strategy of the University of Latvia and the Faculty of Geography and Earth Science detailed it in the Development Plan of the Faculty. The HEI has developed the internal quality assurance system in Form of the Quality Management System Manual of the University of Latvia, which identifies in detail the practice of the University of Latvia in ESG implementation.

- 3 1.2 - A mechanism for the development and internal approval of the study programmes of the higher education institution/ college, as well as the supervision of their performance and periodic inspection thereof has been developed.

Assessment of compliance: Fully compliant

The establishment and internal approval of study programmes are stipulated in the Regulations of the UL. Periodic quality review of study programmes is stipulated in the "Procedure for Preparation of Annual Reports on UL Study Fields"

- 4 1.3 - The criteria, conditions, and procedures for the evaluation of students' results, which enable reassurance of the achievement of the intended learning outcomes, have been developed and published.

Assessment of compliance: Partially compliant

Information related to the evaluation of students' results, as well as ethical norms, are stipulated in the Regulations of the UL and implemented according to them. There is no regulatory enactment in procedures for organizing study courses that state that all of the academic staff involved in the same study course must comply with the same criteria for teaching and evaluating.

- 5 1.4 - Internal procedures and mechanisms for assuring the qualifications of the academic staff and the work quality have been developed.

Assessment of compliance: Fully compliant

The principles of personnel management at the University of Latvia are defined in the UL Personnel Management Policy and implemented according to it.

- 6 1.5 - The higher education institution/ college ensures the collection and analysis of the information on the study achievements of the students, employment of the graduates, satisfaction of the students with the study programme, efficiency of the work of the academic staff, the study funds available and the disbursements thereof, as well as the key performance indicators of the higher education institution/ college.

Assessment of compliance: Fully compliant

The HEI ensures the collection and analysis of information on the study achievements of the students, employment of the graduates, satisfaction of the students with the study programme, efficiency of the work of the academic staff, available study resources and their costs.

- 7 1.6 - The higher education institution/ college ensures continuous improvement, development, and efficient performance of the study field whilst implementing its quality assurance systems.

Assessment of compliance: Fully compliant

The development of the study field is planned in accordance with the 6-year development strategy of the University, and of the Faculty. The monitoring of the implementation and of improvement of the plan is carried out within the annual self-assessment of the study field.

1.3. Resources and Provision of the Study Field

Analysis

Financing of study fields and programmes is based on the document Procedures for Financing of studies at the University of Latvia which defines sources of financing. The document is available in English on the UL website. The document clearly defines tuition fees. The cost of teaching staff is defined in the document Regulations on Remuneration of Teachers. However, that document is not available online in English. According to the Self-assessment report norms for remuneration of the teaching staff are determined by the order of the Rector for the entire university.

According to the interviews conducted support is available for participation in international conferences, publication of scientific papers, organization of scientific activities and preparation of projects. However, data on the amount of funding allocated is not available.

The infrastructural resources include the new building of the Faculty of Geography and Earth Sciences. The building has a sufficient number of classrooms, study laboratories and research laboratories. Laboratories are well equipped. All laboratories are freely accessible to students.

Since this year Library was accredited as a library of national significance. Some parts of the library are available 24 hours a day, 7 days a week. Access to the relevant databases is secured and free of charge for students and teachers. Over the last 6 years, Natural Sciences Library obtained 127 printed books, the majority in English while the University Library obtained 237 books 208 of them in English. Every year The UL Library offers about 110 new electronic resources.

The library organizes and conducts presentations on the usage of databases, offers training for students etc. which is recognized by staff and students as useful.

HEI is well equipped with modern information and communication technologies including free onsite and remote access to databases and statistical and cartographic programmes and material. Students and researchers have access to relevant software i.e. SPSS, MatLab, ESRI ArcGIS etc. Open source e-learning environment MOODLE is well used and commonly accepted.

During the interviews, both students and teachers put a strong emphasis on the availability of software and MOODLE as a channel for communication.

The recruitment and selection of academic staff are regulated by the Regulatory enactments on academic and administrative positions at the University of Latvia. However, the document is available only in Latvian and therefore the application of foreign teachers is not easy. In 2021 HEI had 52 academic staff members of the Faculty who participated in the study programmes. 20 staff members from other structural units participated in the programmes. 35% of lecturers hold the academic title of professor or associate professor. 35% are assistant professors and senior researchers and 30% are researchers, assistants and lecturers. Open places are published on the website and in the Journal of Latvijas Vestnesis.

The balanced structure of teaching and scientific staff in terms of experience, qualification and seniority.

The importance of personal development in both academic and research careers is well recognised in Development Strategy 2022-2027. Although international mobility is promoted it does not have a long- term effects. The professional development of academic staff is organised in accordance with regulations. HEI financially supports the professional development of academic staff through financing participation at international conferences, by organizing courses and presentations on different skills i.e. language courses, courses on management, writing project, teaching, pedagogics and didactics etc. During the interviews PhD students praised the education programme Introduction to teaching in higher education as being useful for their academic careers.

As stated in the Self-assessment report 72 lecturers participate in the implementation of the study field and 46 or 63% of them were elected to the Faculty. The Excel file provided does not include data on hourly workload but only on the titles of subjects taught. A potential problem could be a large number of subjects where some members of the staff teach 10 or even 11 subjects. Although

subjects are closely connected there is a question of time spent in preparation of subjects and the percentage of teaching in the overall workload. Although members of academic staff stated, in the interviews, that workload is evenly distributed (neither of them wanted to say the number of hours per week they spend in the classroom teaching) the Summary of quantitative data on scientific and applied research activities shows a decline in the number of publications since 2018. Also, participation in conferences was also recorded but this can partially be explained by the COVID-pandemic. The Positive is that participation in both national and international projects is rising. Although the number of staff participating in outgoing mobility is rising (until the pandemic) majority is in short-term mobility. A large number of subjects could be an obstacle to participation in long-term mobilities.

Students at the University have access to academic support, career development support and psychological support. Data on psychological counselling is available on the website and can be conducted via email or in person. Also, there is a good level of information or tutorial for students on when and why they should ask for counselling. Career Centre offers counselling on career choices, career issues and support in planning one's career. All data are available on the HEI website. Recommendations for studies are offered by Study Service Department but also from mentors (students), coordinators or study advisors and directors of study programmes. As stated by the students at the interviews they find all types of these assistances to be useful.

International students can rely on HEI's International Relations Coordinator for all relevant data. Also, good quality information can be found on HEI's website under Exchange studies. Especially useful is the Practical Handbook for International Students available online in PDF form.

However, there is no information that the HEI ensures support to students from vulnerable and under-represented groups (i.e. students with disabilities). There is no clear path for students coming from vulnerable groups to seek help.

Conclusions on this set of criteria, by specifying strengths and weaknesses

Financing of study fields, programmes and teaching staff is conducted based on relevant documents. Teachers have financial support available for different scientific activities. The infrastructural resources include the new building of the Faculty of Geography and Earth Sciences with a sufficient number of classrooms, study laboratories and research laboratories. Laboratories are well equipped. All laboratories are freely accessible to students Library is well-equipped with both offline and online resources. HEI is well equipped with modern information and communication technologies including free onsite and remote access to databases and statistical and cartographic programmes and material. Students and researchers have access to relevant software i.e. SPSS, MatLab, ESRI ArcGIS etc. Open source e-learning environment MOODLE is well used and commonly accepted.

The recruitment and selection of academic staff are regulated by the Regulatory enactments on academic and administrative positions at the University of Latvia. However, the document is available only in Latvian and therefore the application of foreign teachers is not easy. HEI has a balanced structure of teaching and scientific staff in terms of experience, qualification and seniority. The importance of personal development in both academic and research careers is well recognised in Development Strategy 2022-2027.

Students at the HEI and University have access to academic support, career development support and psychological support. However, there is no information in English that the HEI ensures support to students from vulnerable and under-represented groups (i.e. students with disabilities). There is no clear path for students coming from vulnerable groups to seek help.

Strength:

Availability of cartographic and spatial materials and programmes onsite and remotely.

Accessibility of laboratories and equipment to students.

HEI is well-equipped with all the necessary software.

Wide and intensive usage of MOODLE.

Organization of education for academic staff i.e. language lessons, courses, Introduction to teaching in higher education

The balanced structure of teaching and scientific staff in terms of experience, qualification and seniority.

Well-presented information is available to help students regarding career and psychological counselling.

Well-presented information is available for foreign students, especially the Practical Handbook for International Students containing information on a wide range of topics concerning everyday life in Latvia.

Weakness:

Vacancies are advertised only on Latvian websites and so is not easy for foreign scientists to note them and apply.

Disbalance between teaching and scientific workload results in lower participation in international long-term mobility and a reduction of scientific outputs.

1.4. Scientific Research and Artistic Creation

Analysis

UL Strategy 2021-2027 (pp 10.) sets development directions and strategic goals for both the University and Faculties stating development principles of scientific excellence and study development as two of three major principles and internationally recognised research and a unique study offer as primary activities or goals. Further on Strategy states key performance indicators. From supplemented appendixes on publications of teaching staff, it is obvious that a vast range of relevant topics are researched at the HEI and their results are published in journals enlisted in SCOPUS and WOS. The goals of the study field are in line with UL's Strategy to become an internationally recognized research university.

Comparison between publication records and teaching obligations shows the correlation between scientific interest and teaching. Scientific research also is an integral part of the study process, and students are encouraged to participate in projects conducted by the researchers. Also, the final thesis always contains results of current research conducted by students and supervised by teachers.

International cooperation of scientists can be monitored through participation in international projects, and international scientific conferences and by publishing papers in relevant international journals. Scientists participate in several HORIZON 2020 projects, LIFE and LIFE+ projects and ESPON projects. Scientists are members of different editorial boards and international organisations. Excellence in research has been defined as one of the priorities of UL and HEI strategy. HEI provides financial and infrastructural support to scientists for participating in research projects and the presentation of results by covering expenses for participation at international conferences and publishing expenses. However large workload in teaching is an obstacle to larger participation in scientific projects.

HEI and teachers stimulate the participation of students in scientific research. Research is integrated into study programmes at all levels and students have access to research laboratories and equipment. Students who participated in interviews confirmed that they are encouraged to conduct research and publish or present their results.

The COVID pandemic and online learning environment prompted teachers to find new online solutions, especially for field courses and practical courses. Teachers developed online courses, and excursion routes with observations and descriptions to be used by students. All materials were uploaded on YouTube and MOODLE. As stated by the students in the interviews they found those instructions to be very useful and enabled them to do the field part of their course on their own.

Conclusions on this set of criteria, by specifying strengths and weaknesses

HEI's development directions and strategic goals are in line with UL Strategy 2021-2027. There is a clear correlation between scientific interest and teaching and scientific research is an integral part of the study process, Students are encouraged to participate in projects conducted by the researchers. Although HEI provides financial and infrastructural scientific work large workload in teaching is an obstacle to larger participation in scientific projects. The COVID pandemic and online learning environment prompted teachers to find new online solutions, especially for field courses and practical courses and this was done very well.

Strength:

Financial support for participation at scientific conferences and for covering publishing expenses.

Supporting students from all study levels to participate in research projects and to publish and present their results.

Participation in HORIZON 2020 projects, LIFE, and LIFE+ projects.

Good adaptation to working in an online environment during the COVID pandemic.

Weakness:

Although HEI participates in "high-class" EU projects it is never a leading partner.

The high workload in classes disables scientists to participate more in top-ranked EU projects.

Assessment of the requirement [2]

- 1 R2 - Compliance of scientific research and artistic creation with the level of development of scientific research and artistic creation (if applicable)

Assessment of compliance: Fully compliant

There is a clear correlation between scientific interest and teaching and scientific research is an integral part of the study process. Faculty participate in large-scale projects only as partners and not as leading institutions. However, this does not affect the final grade and the fact that teachers are scientifically active and that their research complies with the level of development of scientific research.

1.5. Cooperation and Internationalisation

Analysis

In interviews both Directors of study programmes and members of academic staff pointed to good cooperation with different stakeholders (private, non-governmental, governmental etc.). Same for confirmed by representatives of the employers. However, in Annex, only a list of agreements within the framework of the BSP Geoinformatics is provided. Both employers and teaching staff mentioned yearly conferences organized by UL as a focal point where good communication and exchange of information take place.

HEI participates in Erasmus+ and DAAD exchange programmes. Although students are encouraged to participate in exchange programmes number of outgoing mobilities is low due to the fact that most of the students work and are not willing to go abroad. The highest percentage of cooperation is

established through cooperation with Universities from the Baltic region, Germany and Poland. The number of incoming students and teaching staff is low especially over the past two academic years due to the pandemic. The second issue is the fact that the majority of incoming mobility of teaching staff is short-term mobility as host lectures. HEI has a good website with relevant facts about studying and living in Riga and Latvia. However, advertising is conducted through UL and there are no specific measures to attract foreign students and teachers to HEI.

Conclusions on this set of criteria, by specifying strengths and weaknesses

There is good communication between all stakeholders in the development and conduct of study programs. Although students are encouraged to participate in exchange programs number of outgoing mobilities is low. Also, the number of incoming students and teaching staff is low especially over the past two academic years due to the pandemic. Also, both incoming and outgoing long-term mobility of teaching staff is very low and should be improved.

Strength

Good level of cooperation with relevant stakeholders.

Informative website on incoming mobility, studying in HEI and living in Latvia.

Weakness

A low number of outgoing mobilities of students due to their working obligations.

A low number of outgoing mobilities of teaching staff due to high teaching workload.

Assessment of the requirement [3]

- 1 R3 - The cooperation implemented within the study field with various Latvian and foreign organizations ensures the achievement of the aims of the study field.

Assessment of compliance: Partially compliant

Only some progress in comparison with the previous assessment is made. The outgoing mobility is at a low level, while another kind of cooperation is good.

1.6. Implementation of the Recommendations Received During the Previous Assessment Procedures

Analysis

During the previous evaluation, this study field was given many recommendations in regard to mobility for staff and students, as well as incoming and going mobility.

1. It was recommended to increase internationalization and to introduce more studies in English and as a result, the university has expanded its ability to teach study courses in English for masters study programmes in geography and geology. The number of foreign guest lecturers increased, however, due to the Covid-19 pandemic the numbers decreased in recent years. Due to understandable reasons, this recommendation is partially implemented.

2. Regarding increasing transparency on mobility opportunities for students and academic staff the recommendation is fully implemented. The faculty has a regularly updated UL FGES website that promotes mobility opportunities and they send emails to students as well.

3. Regarding proven systems of reimbursement of publications - The university has implemented a BONUS system for motivating academic staff to increase their publications in WoS/SCOPUS databases. This recommendation is fully implemented.

4. Regarding employers' involvement in studies and research - there have been signed cooperation agreements with different institutions and companies such as Jāņa sēta, Geoinformatics Information

Agency of Latvia, Envirotech, Central Statistics Bureau, Latvian State Forests, Ministry of Environmental protection and regional development etc. During the visit, students and graduates appreciate the cooperation between the labour market and the university. This recommendation has been implemented.

5. During the visit, the university was asked to describe the discussions regarding the desirability of a four-year bachelor's programme, in return, programme directors responded that they concluded that it is more suitable and attractive for new students if they prepare the graduates over a three-year period. They showed concern regarding the fact that students would not want to enrol in a 4-year bachelor programme, and they would lose more potential students. The recommendation has been fully satisfied.

6. Regarding active communication on motivation and potential resources and opportunities for research and mobility programmes – the university organizes regular consultations at the chair and departmental meetings and during the visit, academic staff confirms that they are very informed about mobility possibilities. The research projects with other institutions are actively increasing. This recommendation is still in implementation, however, there is already a great amount of work done.

7. Regarding feedback systems and hearing student opinions – the faculty together with faculties student council has developed informal meetings of students with the dean and programme directors where everyone is given a chance to express their opinion about study quality and study programmes in general. It is well-regarded by students. This recommendation is fully implemented.

8. During the visit, graduates expressed appreciation for seminars and meetings organized by both the faculty and students council where they can communicate with the university and offer things in return. As stated before the university has signed various agreements with companies, some of whom have graduates of this study field, therefore the cooperation with involved parties is good. This recommendation is implemented.

Regarding bachelor study programmes “Geography” and “Geology” (code 43442).

1. The study programme admission rules have been preserved since the previous study field evaluation, throughout discussions it was determined to keep them and not change them because they evaluate the knowledge of school graduates in natural sciences and languages which are important for studies in this field. This recommendation has been taken into consideration and satisfied.

2. Study programme directors and department chairs are responsible to remind academic staff to renew lists of study materials before every semester. During the visit, academic staff confirms this therefore this recommendation is fully satisfied.

Regarding master study programmes “Geography” and “Geology” (code 45422)

1. Study programme directors and department chairs are responsible to remind academic staff to renew lists of study materials before every semester. During the visit, academic staff confirms this therefore this recommendation is fully satisfied.

2. It was advised during the last evaluation to make the master thesis publicly available, however, the management of the University of Latvia does not consider it necessary due to different court proceedings regarding the infringement of intellectual property rights. Given this fact, it is considered that this recommendation has been discussed and considered.

3. It was recommended to attract more international guest lecturers for further internationalization of the study programme and the university has used the possibilities of Erasmus+, Erasmus Mundus and other programmes, however, due to the pandemic and other circumstances the number of guest lecturers could be greater. It is advised to keep working on this recommendation, therefore it's partly implemented.

During the licensing of study programmes, a professional bachelor study programme “Geoinformatics” has been licenced. It was well regarded by all involved stakeholders, with various

parties stating that it has great potential to produce greatly needed specialists for the field.

University has provided answers to short-term recommendations –

a. It was planned to have both Latvian and foreign students enrolled in the programme since the year 2022./2023. and this has been fulfilled – during the visit, students confirmed that they are satisfied with their studies here.

b. The difference between tuition fees for students are as follows: for the Latvian group 2100 EUR, and for the English group 3100 EUR.

c. It has been confirmed that many employers operate in an international environment and are willing to take on international students for internships. This was confirmed during the visit.

All of the short-term recommendations have been implemented.

Regarding long-term recommendations:

1. Consideration of reallocation of financial resources for the next academic years, addressing the small number of budget places dependent on programme demand and making the programme more accessible to Latvian students is still ongoing and in process, therefore implemented partly.

2. Study programme staff has evolved their language skills appropriate enough to work with foreign students with the help of specific support project 8.2.2. "Renewal and Competence Development of Academic Staff at the University of Latvia", teaching staff used the opportunity to improve their qualification by attending the course "Improvement of Professional English Language Skills of Academic Staff for Work in the Study Environment". This recommendation has been fulfilled.

3. It was recommended that the teaching staff involved in the study programme should focus more on publications and should be encouraged to pursue higher degrees. The University of Latvia motivates every academic staff member to pursue a doctoral degree and several responsible for teaching in the study programme are currently studying for a doctoral degree. Furthermore, there is a determined expected number of publications in the assignments of the UL members, therefore it encourages academic staff to write more scientific publications.

4. The university is still in the progress to encourage programme teaching staff to be more actively involved in mobility. This recommendation has been held back from implementation due to the pandemic and war in Ukraine, however, it is in progress currently. This implementation has been taken into consideration.

5. There have been made various agreements between different stakeholders therefore it is possible to organize various study tours and other exchanges between municipalities and organizations and businesses. This recommendation has been taken into consideration and is in progress.

The University of Latvia has made great efforts to acknowledge and implement all of the given recommendations since the previous assessment. Unfortunately, internationalization and exchange efforts have been troubled by epidemiological problems and global conflicts, however, this study field has successfully overcome its biggest previous challenges. It must be noted that there should be a continued effort to support any type of internationalization development.

Conclusions on this set of criteria, by specifying strengths and weaknesses

The University of Latvia has acknowledged previous recommendations and is implementing them to improve the study field and study programmes. There are some deficiencies, but UL has addressed them and is still improving. These deficiencies are not that important to evaluate this section as partially compliant.

Strength

University motivates academic staff to acquire doctoral degrees

Students and academic staff appreciate the amount of information available about different

exchange opportunities and it shows that the university is putting a great effort to motivate them to use these opportunities.

Students and graduates appreciate the cooperation between the labour market and University.

Weakness

Although there is a noticeable rise in the number of foreign guest lecturers the majority of them are short-term stays.

Assessment of the requirement [4]

- 1 R4 - Elimination of deficiencies and shortcomings identified in the previous assessment of the study field, if any, or implementation of the recommendations provided.

Assessment of compliance: Partially compliant

Although the majority of recommendations from the previous reaccreditation were taken into account there is a still low number of incoming and outgoing teachers.

1.7. Recommendations for the Study Field

Short-term recommendations

Relate the goals of the study programs to the goals of the study field.

Ensure regulatory enactment in procedures of organizing study courses that state that all of the academic staff involved in the same study course must comply with the same criteria for teaching and evaluating.

Continuing good communication with the stakeholders while defining communication modes between different stakeholder groups.

Further, improve the English websites of the faculty and the University.

Advertise vacancies in English in order to attract foreign scientists and teachers.

Target and approach wanted top-ranked scientists and invite them as foreign lecturers.

Long-term recommendations

To lower student dropout rates optimise the study field management (together with the study program management) in terms of study organisation.

Discuss rebalancing teaching and scientific workload in order to encourage international long-term mobility, scientific outputs and participation in the top-ranked project of teaching staff.

Provide assistance in the preparation of large-scale EU projects.

Discuss possibilities of partly financing students on outgoing mobilities in order to encourage them to apply for mobilities.

To continue and put extra effort into attracting foreign guest lecturers, especially in masters level study programmes

II - "Geoinformatics" ASSESSMENT

II - "Geoinformatics" ASSESSMENT

2.1. Indicators Describing the Study Programme

Analysis

Geoinformatics is the technological part of spatial sciences, first of all of Geography, which allows making spatial (territorial) analysis, so it fully complies with the study field and is one of the most required from the side of society and of the business part. The study program makes it possible to fulfil these needs perfectly, with strong technological and engineering content, providing the labour market with highly needed professionals.

The title "Geoinformatics" and the degree to be obtained "Professional bachelor's degree in geoinformatics", show that the program seeks to train geoinformatics professionals. The program code 42442 is correctly designed and corresponds to the regulations (Regulation of the Cabinet of Ministers of June 13, 2017 no. 322 "Regulations on the classification of education in Latvia"); the first two digits of the program code indicate the Professional Bachelor's degree and 5th professional qualification level, while the third to fifth digits (442) correspond to the Geography and Earth Sciences study field. The programme complies with the 6th professional qualification level.

The program code matches the other program parameters. The program is developed on the basis of the Professional Standard for Geoinformatics Engineer (approved by the Tripartite Cooperation Sub-Council for Professional Education and Employment of the Ministry of Education and Science). The aim of the program "is to train highly skilled geoinformatics professionals, preparing them for competition in domestic and international labour markets", objectives, results, and the content, given in the description, of the program correspond to its title, code, and the degree to be obtained. Judging from information from the meeting with teachers, and students, it meets the goals, tasks, and requirements set for it. A duration of 4 years and the possibility to study it in Latvian and English is reasonable for the professional Bachelor's and is important for the requirements of the labor market.

This is a very new study program, functioning only in the 3rd semester, but interest in it from the side of potential students is relatively high and it is planned to increase the number of acquired students with state financing from 9 to 10, while the total number of students remains 15.

Conclusions on this set of criteria, by specifying strengths and weaknesses

Conclusions

The highly required new study program is justified and complies with the study field. It has the potential to be developed and taught in Latvian and English languages, acquiring students from Latvia and other countries.

Strength

The well-prepared and required professional study program, with the potential to be developed according to the needs of the labour market.

Weaknesses

No weaknesses were identified.

2.2. The Content of Studies and Implementation Thereof

Analysis

The content of "Geoinformatics" is updated and corresponds to industry trends in Latvia and Europe, which is approved in the Report and confirmed by the employers during the Visit. According to the

medium and long-term labour market forecasts of the Ministry of Economy, a shortage of highly qualified specialists in natural sciences, and engineering is expected, so the demand for digital skills and the ability to work with geospatial information and the observer will only increase in the future. In the professional bachelor study programme Geoinformatics, the study courses are interconnected and they ensure the realization of the goals of the study program - to provide the state economy with highly qualified geoinformatics specialists who are able to compete in both the local and international labour market. The study programme is implemented in the amount of 160 CP, in four years, fulfilling the achievable study results in the application of knowledge, skills, competencies and critical analysis in the geoinformatics field.

The course content, degree, goal and objectives of the programme are entirely consistent with each other. By fulfilling the objectives of the programme, students are able to achieve the goal of the programme. As a result, graduates of the programme obtain a professional Bachelor's degree in Geoinformatics and qualification of Geoinformatics Engineer, which allows them to participate in the labour market and continue their studies in the Master's programme.

The study programme "Geoinformatics" was created in accordance with the Cabinet of Ministers' regulations No. 512 "Regulations on the state standard of second-level professional higher education" and referring to the Report, all requirements are fulfilled. Study courses are combined oral and written test methods and are used during the study period. Employers are involved in the implementation and development of study courses. Speaking, presenting and discussion skills of students are promoted in study courses in seminars. In the process of studying methods are used that promote student communication in performing study tasks by solving real industry problems by modelling situations. Lecturers mostly use methods that encourage students' active participation, critical thinking and reflection. Students receive support and feedback from lecturers during the study process. The results of student surveys are evaluated and taken into account in the improvement of the study process.

The study programme "Geoinformatics" is a professional study program, so an essential part of the studies is the student practice included in it in the amount of 20 CP. Internship opportunities are provided at leading geoinformatics industry companies and institutions. Foreign students are provided with internship opportunities in English. The purpose of the internship is to improve the student's professional skills and competencies in a professional environment, as well as strengthen and supplement his knowledge; strengthen practical skills. During the internship, the methods of information collection, processing, analysis and systematization must be learned in one of the sub-branches of geography - applied geography. During the internship, students develop an individual research project, and discuss it, thus certifying it skills of using acquired knowledge in scientific research work. During practice, collecting research data in the field of geoinformatics and participating in research as participants, students demonstrate an understanding of research ethics. The student implements the internship in two parts, each in the amount of 10 CP, in the 5th and 7th study semesters. During the internship, an important task is to plan and organize research for the development of a study thesis or bachelor's thesis at the final stage of studies. Students' experiences play an important role in practice seminars for exchange because the student group is at the same time a mutual support and learning group and can be valuable emotional and professional support during the study process and at the time of starting a career.

Final theses in the professional bachelor's study program "Geoinformatics" have not yet been developed. The final thesis must be developed in accordance with the LU order "Requirements for the development and defence of final theses (bachelor's, master's theses, diploma theses, and qualification theses) (LU 11.02.2020 order No. 1/454) and in accordance with the regulations of Faculty of Geography and Earth Sciences of "On the final thesis in geography, in geology, spatial planning and professional study programs for teachers, development and defence procedure".

Conclusions on this set of criteria, by specifying strengths and weaknesses

The content of the "Geoinformatics" study programme is updated and corresponds to industry trends. The program is balanced and its content fully complies with the national standard of second-level professional higher education. The implementation mechanism of the study program has been developed and implemented in detail, in accordance with the internal laws and regulations of the state and LU. The Faculty of Geography and Earth Sciences has developed a quality assessment and management system that contributes to the high-quality implementation and further operation of the "Geoinformatics" study program.

Strength

The content of the "Geoinformatics" study programme is up-to-date and corresponds to industry trends in Europe. Course descriptions are clear, logical and professionally prepared. The practice envisaged in the study program strengthens students' knowledge and skills. Good cooperation with industry representatives and employers.

Weakness

The organization of the distance study process reduces the quality of education.

Assessment of the requirement [5] (applicable only to master's or doctoral study programmes)

- 1 R5 - The study programme for obtaining a master's or doctoral degree is based on the achievements and findings of the respective field of science or field of artistic creation.

Assessment of compliance: Not relevant

Not relevant

2.3. Resources and Provision of the Study Programme

Analysis

The material and technical support of the LU meets to ensure the implementation of the study program on the premises of the Academic Center of the University of Latvia. The study process is provided with relevant computer programs and office equipment. LU offers students and employees a free opportunity for the period of study (or employment contract) to get into using Microsoft Office 365 ProPlus and SPSS software, as well as GIS software for a personal computer. UL's infrastructure allows students to stay and study in modern classrooms with interactive whiteboards and learn practical skills in spacious, well-equipped laboratories. The courses to be studied in the study program have been created in the estudijas.lu.lv Moodle. In the "Geoinformatics" study programme, students receive the adequate provision of the informational base for learning courses and developing final theses. Material and technical support is renewed every year.

To provide the funds necessary for the implementation of the "Geoinformatics" study programme, LU uses State grants and its own revenues. In order to estimate the number of funds required for financial security, the cost price of LU study programs is calculated according to the methodology developed by LU. The study and research base, informative and material-technical base corresponds to the specifics of the "Geoinformatics" study programme, and implementation conditions. It creates prerequisites for achieving study results and shows the possibility of ensuring a high-quality study process.

Conclusions on this set of criteria, by specifying strengths and weaknesses

The study base, including the participating structural units (departments, groups of professors, laboratories, institutes, etc.) and the necessary auxiliary personnel, according to experts, is

appropriate for the implementation of the "Geoinformatics" study programme. The collection of the LU library meets the conditions for the implementation of studies and the development of scientific research. The financial basis and costs of the study programme are appropriate for the needs of the study programme. The financial base is sufficient to ensure the study process.

Strength

The study programme is implemented in close cooperation with the Faculty of Computing, which promotes the development of interdisciplinary education and professions. Wide provision of the material and technical base, which provides very good opportunities for learning a profession.

Weakness

A large building will require high maintenance costs in the future.

Assessment of the requirement [6]

- 1 R6 - Compliance of the study provision, science provision (if applicable), informative provision (including library), material and technical provision and financial provision with the conditions for the implementation of the study programme and ensuring the achievement of learning outcomes

Assessment of compliance: Fully compliant

HEI has all resources (financial, technical, informative etc.) at its disposal for both students and academic staff.

2.4. Teaching Staff

Analysis

PBSP "Geoinformatics" involves 33 teaching staff, including 7 professors, 9 associate professors, 9 assistant professors, 7 researchers, as well as one industry representative. During the experts' visit and after getting acquainted with the available materials, it can be concluded that the number of teaching staff and their qualifications confirm that the number of teaching staff has the appropriate qualifications for the implementation of the study program. The teaching staff of PBSP "Geoinformatics" have increased their qualifications for 2019-2021 project no. 8.2.2.0/18/A/010 in the framework of "Renewal of academic staff and improvement of competencies at the University of Latvia". The professional development and renewal of the teaching staff of PBSP "Geoinformatics" can be evaluated positively and is aimed at obtaining versatile, modern and high-quality higher education.

PBSP "Geoinformatics" studies started in the 2021/2022 academic year and there have been no changes.

Questions regarding the progress of studies are periodically reviewed by the study direction council. A mechanism for mutual cooperation of the teaching staff has been established in order to promote the improvement of study courses. The cooperation of the teaching staff was also demonstrated during the experts' visit.

Conclusions on this set of criteria, by indicating strengths and weaknesses

The professional development and renewal of the teaching staff of PBSP "Geoinformatics" can be evaluated positively and is aimed at obtaining versatile, modern and high-quality higher education.

Strength

Academically and practically strong teaching staff. High qualification of teaching staff.
Wide opportunities for improving the qualifications of teaching staff

Weaknesses

Weak international mobility of teaching staff.

Assessment of the requirement [7]

- 1 R7 - Compliance of the qualification of the academic staff and visiting professors, visiting associate professors, visiting docents, visiting lecturers and visiting assistants with the conditions for the implementation of the study programme and the requirements set out in the respective regulatory enactments.

Assessment of compliance: Fully compliant

The academic staff at the program is highly qualified for the implementation of the study programme.

2.5. Assessment of the Compliance

Requirements

- 1 1 - The study programme complies with the State Academic Education Standard or the Professional Higher Education Standard

Assessment of compliance: Fully compliant

The study programme "Geoinformatics" volume is 160CP of which 20 CP are compulsory part covering the overall educational field, 40CP cover basic theoretical courses and information technology courses in this field, 62 CP are the elective compulsory part, 6CP for the free elective part, 20CP for internships and 12CP for Bachelor's thesis.

Compliance with the study programme with the State Education Standard is described in Annex No 50.

If there were to be an additional category in Cabinet of Ministers No. 322 Rules about Latvian education classification in the Natural sciences subcategory (just like in engineering sciences there is code 526 for other engineering sciences) it would be more appropriate for this study programme, however, since the majority (approximately 60 %) of contents are implemented in this study field, its code is determined appropriate.

- 2 2 - The study programme complies with a valid professional standard or the requirements for the professional qualification (if there is no professional standard required for the relevant occupation) provided if the completion of the study programme leads to a professional qualification (if applicable)

Assessment of compliance: Fully compliant

The study programme is meeting the criteria set in "Regulations of the Cabinet of Ministers on the Classifier of Professions, Basic Tasks Corresponding to the Profession and Basic Qualification Requirements No. 264" and Professional Higher Education Standard. The study programme complies with a recently made valid professional standard PS-105 and sufficiently provides the required knowledge for carrying out basic tasks for the profession.

The study programme complies with a valid professional standard, see Annex No 51.

- 3 3 - The descriptions of the study courses and the study materials have been prepared in all languages in which the study programme is implemented, and they comply with the requirements set forth in Section 561 , Paragraph two and Section 562 , Paragraph two of the Law on Higher Education Institutions.

Assessment of compliance: Fully compliant

Study course descriptions and study materials are prepared in Latvian and English languages, and they satisfy requirements set in Law on Higher Education Institutions. However, Faculty management must make sure that lecturers update study course descriptions with literature up to date regularly (at least once per year or once every two years). It should be noted that some of the A and B part study course descriptions have compulsory literature dating from 2000.-2010. year period and they could be considered a bit outdated.

- 4 4 - The sample of the diploma to be issued for the acquisition of the study programme complies with the procedure according to which state recognised documents of higher education are issued.

Assessment of compliance: Fully compliant

The diploma issued complies with the state legislature and "Procedures by which documents certifying higher Education recognised by the State shall be issued" (Cabinet of Ministers No. 202). See annex: Standard sample of study agreement Annex No. 7.

- 5 5 - The academic staff of the academic study programme complies with the requirements set forth in Section 55, Paragraph one, Clause 3 of the Law on Higher Education Institutions.

Assessment of compliance: Not relevant

not relevant

- 6 6 - Academic study programmes provided for less than 250 full-time students may be implemented and less than five professors and associated professors of the higher education institution may be involved in the implementation of the mandatory and limited elective part of these study programmes provided that the relevant opinion of the Council for Higher Education has been received in accordance with Section 55, Paragraph two of the Law on Higher Education Institutions.

Assessment of compliance: Not relevant

not relevant

- 7 7 - At least five teaching staff members with a doctoral degree are among the academic staff of an academic doctoral study programme, at least three of which are experts approved by the Latvian Science Council in the respective field of science. At least five teaching staff members with a doctoral degree are among the academic staff of a professional doctoral study programme in arts (if applicable).

Assessment of compliance: Not relevant

not relevant

- 8 8 - The teaching staff members involved in the implementation of the study programme are proficient in the official language in accordance with the regulations on the level of the official language knowledge and the procedures for testing official language proficiency for performing professional duties and office duties.

Assessment of compliance: Fully compliant

The academic staff has sufficient Latvian language knowledge for implementing study courses, see annex: Basic information about the teaching staff involved in the implementation of the study field No.9.

- 9 9 - The teaching staff members to be involved in the implementation of the study programme have at least B2-level knowledge of a related foreign language, if the study programme or any part thereof is to be implemented in a foreign language (if applicable).

Assessment of compliance: Fully compliant

The academic staff has sufficient foreign language knowledge for implementing study courses, see annex: Basic information about the teaching staff involved in the implementation of the study field No.9.

- 10 10 - The sample of the study agreement complies with the mandatory provisions to be included in the study agreement.

Assessment of compliance: Fully compliant

Study agreements include all necessary parts set in legislation. See the annex: Standard sample of study agreement No.7.

It is advised to include information about guarantees of compensation losses (11. and 12. criteria) so that this information is easier for the students to acknowledge already from the beginning.

- 11 11 - The higher education institution / college has provided confirmation that students will be provided with opportunities to continue their education in another study programme or another higher education institution or college (agreement with another accredited higher education institution or college) if the implementation of the study programme is terminated.

Assessment of compliance: Fully compliant

University has a record order as confirmation that in case the implementation of this study programme is terminated students will be able to continue studies in the UL academic bachelor study programme "Geography". See annex: A copy of a document certifying that the higher education institution will provide students with opportunities to continue their education in another study programme No. 5.

- 12 12 - The higher education institution / college has provided confirmation that students are guaranteed compensation for losses if the study programme is not accredited or the study programme's license is revoked due to the actions (actions or omissions) of the higher education institution or college and the student does not wish to continue studies in another study programme.

Assessment of compliance: Fully compliant

University has a rector's order that confirms it will compensate losses to students if the study programme is not accredited or loses its license and the student does not wish to continue studies in another study programme. See annex: A copy of a document certifying that the higher education institution guarantees compensation for losses to students No. 6. It is advised to include this information in the study agreement.

- 13 13 - The joint study programmes comply with the requirements prescribed in Section 55.(1), Paragraphs one, two, and seven of the Law on Higher Education Institutions (if applicable)

Assessment of compliance: Not relevant

not relevant

- 14 14 - Compliance with the requirements specified in other regulatory enactments that apply to the study programme being assessed (if applicable)

Assessment of compliance: Not relevant

not relevant

Assessment of the requirement [8]

- 1 R8 - Compliance of the study programme with the requirements set forth in the Law on Higher Education Institutions and other regulatory enactments.

Assessment of compliance: Fully compliant

The requirement has been met and fulfilled, and all requirements set in different regulatory enactments are satisfied.

General conclusions about the study programme, indicating the most important strengths and weaknesses of the study programme

The study programme is justified and complies with the study field. The programme is in line with the strategic goals of the University of Latvia. This study programme is new but it is well recognized by all stakeholders and should provide the labour market with highly skilled specialists. This study programme has the potential to be developed and taught in Latvian and English languages, acquiring students from Latvia and other countries. The content of the study courses corresponds to the objectives of the study programme and ensures the achievement of learning outcomes. Faculty has a wide provision of the material and technical base, which provides very good opportunities for learning a profession. The professional development of the teaching staff is encouraged.

Strengths:

The well-prepared and required professional study programme, with the potential to be developed according to the needs of the labour market.

The content of the "Geoinformatics" study programme is up-to-date and corresponds to industry trends in Europe.

High qualification of teaching staff.

Wide opportunities for improving the qualifications of teaching staff

Weakness:

The organization of the distance study process reduces the quality of education.

A large building will require high maintenance costs in the future.

Weak international mobility of teaching staff.

Evaluation of the study programme "Geoinformatics"

Evaluation of the study programme:

Excellent

2.6. Recommendations for the Study Programme "Geoinformatics"

Short-term recommendations

Combine different methods of teaching and learning in order to ensure the quality of education.

Long-term recommendations

Look for extra resources of funding in order to save the state money for large maintenance expenses.

II - "Geography" ASSESSMENT

II - "Geography" ASSESSMENT

2.1. Indicators Describing the Study Programme

Analysis

The title "Geography" and the degree to be obtained "Bachelor of Natural Sciences in Geography", show that the program seeks to train graduates with theoretical knowledge and research skills in the field of Geography. The goal of the study program is in line with the purpose of the study field.

Only one remark to the study goal "[...] which provides an opportunity to successfully participate in solving economic problems." Geography as in half human (social) science provides an opportunity to solve social and human problems too. The competencies of the staff are sufficient to develop these competencies of the students, and it is being done during the implementation of the study program.

The program code 43442 is correctly designed and corresponds to the regulations (Regulation of the Cabinet of Ministers of June 13, 2017 no. 322 "Regulations on the classification of education in Latvia"): the first two digits of the program code indicate the Academic Bachelor's degree, while the third to fifth digits (442) correspond to the Geography and Earth Sciences study field. The programme complies with the 6th professional qualification level.

The program code matches the other program parameters. The aim of the program "is to provide students with high-quality acquisition of theoretical knowledge and research skills in the field of geography, theoretical and practical training corresponding to the needs of the labour market, which provides an opportunity to successfully participate in solving economic problems", objectives, results, and the content, given in the description of the program correspond to its title, code, and the degree to be obtained. The duration of the program (full-time studies - 3 years, part-time studies - 4 years) is justified and corresponds to the Bologna Declaration.

The aim and objectives of the study program and admission requirements have not changed since the last accreditation. After that, the study program director was changed and, according to the administration and the students, it was the right decision. The study program director is active to deal with everyday and essential challenges of the study program implementation. According to interviews with teaching staff and the director outcomes and literature are updated regularly at least once a year.

The BSP in Geography is the only program of that kind offered in Latvia and therefore is a necessary one to obtain. Interviews with employers and graduates showed that students are easily employed even during their studies. Graduates are employed both in the private and governmental sectors. In the private sector, graduates are employed in different companies dealing with nature, cartography, remote sensing etc. In the governmental sector, they are employed in statistics, spatial planning, meteorology, regional environmental administrations etc. According to employers, graduates of this program have a good theoretical background, can work independently and most important have developed the ability to acquire new knowledge and skills.

Unfortunately, the number of students at the BSP graduating in the reporting period is much lower than the number of students enrolled.

Conclusions on this set of criteria, by specifying strengths and weaknesses

The BSP in Geography is the only programme of that kind offered in Latvia and therefore is a necessary one to obtain. The goal of the study programme is in line with the goal of the study field and it is to provide students with high-quality theoretical knowledge and research skills in the field of Geography. The study program is being developed taking into account the requirements of previous accreditation and emerging challenges. Graduates are employed both in the private and governmental sectors. Graduates of this programme have a good theoretical background, can work independently and most important have developed the ability to acquire new knowledge and skills.

Strength

Graduates are recognized in the market and are valued as workers with a good theoretical background and developed the ability to learn.

The aim and objective of the programme are in line with the contemporary position of geography as a science and profession.

Weakness

The low number of graduates in comparison to the number of students enrolled.

There is no clear evidence that updates to the programme are done continuously.

2.2. The Content of Studies and Implementation Thereof

Analysis

BSP Geography is implemented in full-time (3 years; 120 CP) and part-time (4 years; 120 CP) studies. Studies are realised in Latvian and English. BSP Geography study courses are interconnected and they ensure the realization of the goals set by the study program - to provide students with high-quality theoretical knowledge and research skills in the field of geography, theoretical and practical preparation corresponding to the needs of the labour market. BSP Geography is implemented by achieving study results and graduates demonstrating knowledge, skills and competencies in geography in a theoretical and practical framework.

The content of the courses corresponds with the programme outcomes. According to the stakeholders, the outcomes of the study programme meet the needs of the labour market. The only subject that was stated as necessary is maths which some of the graduates found to be missing in the BSP Geography. The programme complies with national regulations.

Students are put in the centre of the teaching process by promoting student research competencies and encouraging them to participate in projects and present and publish their results. Practical assignments and fieldwork contribute to active learning. The COVID-19 pandemic promoted learning in the online environment and the study process has to adapt to remote settings. According to students it was done smoothly and students were satisfied. Both teachers and students developed skills and competencies in working with different online tools.

The choice of themes for the final thesis of the BSP Geography is made according to the student's interest. This was confirmed by the students at the interview. Sometimes certain topics are afterwards developed and researched in more depth in the Master's programme. The themes of the thesis are research-based and cover all geographic disciplines. In order to work on their thesis students have access to different databases and laboratories.

Conclusions on this set of criteria, by specifying strengths and weaknesses

BSP Geography prepared specialists are able to solve various types of economic problems using the latest geospatial solutions. Wide provision of the material and technical base, which provides very good opportunities for learning a profession.

Strength

Strong academic teaching staff. Strong alumni solidarity and cooperation.

Weakness

No weaknesses were identified.

Assessment of the requirement [5] (applicable only to master's or doctoral study programmes)

- 1 R5 - The study programme for obtaining a master's or doctoral degree is based on the achievements and findings of the respective field of science or field of artistic creation.

Assessment of compliance: Not relevant

Not relevant

2.3. Resources and Provision of the Study Programme

Analysis

BSP Geography has good infrastructural prerequisites. Laboratories are well-equipped and open for students. The library is open 24/7 with a selection of online sources available on-site and remotely. The number of printed on-site books is a little scarce but those obtained are up-to-date with current trends in geography research. The material and technical provisions are renewed every year.

The Ministry of Education and Science covers tuition fees in the amount of 3097 € per student per year. The tuition fee for full-time students is set to 2000 € per year. The tuition fee for part-time students is set to 1500 € per year per student. Also, as stated by the teaching staff and director of the programme there are several contracts with stakeholders, mainly from the private sector who participate in the financing of the study programme, especially in concern with acquiring necessary equipment and financing field trips.

Conclusions on this set of criteria, by specifying strengths and weaknesses

BSC Geography has good infrastructural prerequisites with well-equipped laboratories and a library that is open 24/7. Tuition fee is covered by the ministry and together with funds obtained from the stakeholder are covering all the necessary expenses.

Strength

Good infrastructural prerequisites.

Well-equipped laboratories are available to students.

Good provision of databases for both onsite and remote usage.

Weakness

No weaknesses were identified.

Assessment of the requirement [6]

- 1 R6 - Compliance of the study provision, science provision (if applicable), informative provision (including library), material and technical provision and financial provision with the conditions for the implementation of the study programme and ensuring the achievement of learning outcomes

Assessment of compliance: Fully compliant

BSC Geography has all the needed infrastructural prerequisites for the implementation of the study program.

2.4. Teaching Staff

Analysis

The qualifications and the number of the teaching staff are in line with regulatory enactments. The scientific and professional activities of the teaching staff have a positive effect on the teaching process. This was also confirmed by the students in the interviews who stated that they find it useful

that teachers involve them in their research activities as a part of the practical work on the course. From the list of published papers, it is clear that the research activities are closely related to the course they teach. Research activities often result in the introduction of a new course i.e. polar research and Polar geography.

In all time over the last five years composition of the teaching staff is in compliance with regulatory enactments.

The teaching-staff ratio per student is 1:2,67 which is sufficient to ensure the quality of the teaching process. Also, 23 subjects in the programme are taught by 42 members of the teaching staff which is a ratio of 1,82 teachers per course. As confirmed by interviews with teaching staff lot of attention is given to forming and maintaining the same criteria among different teachers on the course. As confirmed by the students in the interviews they find multiple teachers on the course to be useful because they can approach both of them for assistance.

Conclusions on this set of criteria, by indicating strengths and weaknesses

The qualifications and the number of the teaching staff are in line with regulatory enactments. The scientific and professional activities of the teaching staff have a positive effect on the teaching process. Research activities often result in the introduction of a new course. Although teaching staff participates in short-term mobilities number of teachers participating in long-term mobilities is low.

Strength

The scientific and professional activities of the teaching staff have a positive effect on the teaching process.

Research activities result in the introduction of a new course

Weakness

The low number of international mobility of lecturers.

Assessment of the requirement [7]

- 1 R7 - Compliance of the qualification of the academic staff and visiting professors, visiting associate professors, visiting docents, visiting lecturers and visiting assistants with the conditions for the implementation of the study programme and the requirements set out in the respective regulatory enactments.

Assessment of compliance: Fully compliant

Teachers are qualified for the implementation of the designated study program. The qualifications and the number of the teaching staff are in line with regulatory enactments.

2.5. Assessment of the Compliance

Requirements

- 1 1 - The study programme complies with the State Academic Education Standard or the Professional Higher Education Standard

Assessment of compliance: Fully compliant

Study programme Geography (43442) complies with the State Academic Education Standard (Cabinet of Ministers No. 240).

The study programme Geography volume is 120CP of which 84 CP are for the compulsory part covering the overall educational field, 34 CP are for an elective compulsory part, 2CP for the free elective part, and 10CP for Bachelor's thesis.

Compliance with the study programme with the State Education Standard is described in Annex No 24.

- 2 2 - The study programme complies with a valid professional standard or the requirements for the professional qualification (if there is no professional standard required for the relevant occupation) provided if the completion of the study programme leads to a professional qualification (if applicable)

Assessment of compliance: Not relevant

not relevant

- 3 3 - The descriptions of the study courses and the study materials have been prepared in all languages in which the study programme is implemented, and they comply with the requirements set forth in Section 561 , Paragraph two and Section 562 , Paragraph two of the Law on Higher Education Institutions.

Assessment of compliance: Fully compliant

Study course descriptions and study materials are prepared in Latvian and English languages, and they satisfy requirements set in Law on Higher Education Institutions. However, Faculty management must make sure that lecturers update study course descriptions with literature up to date regularly (at least once per year or once every two years). It should be noted that some of the A and B part study course descriptions have compulsory literature dating from 2000 to the 2010 year period and they could be considered a bit outdated.

- 4 4 - The sample of the diploma to be issued for the acquisition of the study programme complies with the procedure according to which state recognised documents of higher education are issued.

Assessment of compliance: Fully compliant

The diploma issued complies with the state legislature and "Procedures by which documents certifying higher Education recognised by the State shall be issued" (Cabinet of Ministers No. 202). See annex: Standard sample of study agreement Annex No. 7.

- 5 5 - The academic staff of the academic study programme complies with the requirements set forth in Section 55, Paragraph one, Clause 3 of the Law on Higher Education Institutions.

Assessment of compliance: Fully compliant

There are at least 5 assoc. professors or professors involved in the study programme implementation together. See annex: Certification that academic staff of the academic study programme "Geography" bachelor complies with the requirements laid down in section 55 No.11.

- 6 6 - Academic study programmes provided for less than 250 full-time students may be implemented and less than five professors and associated professors of the higher education institution may be involved in the implementation of the mandatory and limited elective part of these study programmes provided that the relevant opinion of the Council for Higher Education has been received in accordance with Section 55, Paragraph two of the Law on Higher Education Institutions.

Assessment of compliance: Fully compliant

This criterion is met and AIP has approved the implementation of the study programme. See annex: Council of Higher education Opinion Brief No. 22.

- 7 7 - At least five teaching staff members with a doctoral degree are among the academic staff of an academic doctoral study programme, at least three of which are experts approved by the Latvian Science Council in the respective field of science. At least five teaching staff members with a doctoral degree are among the academic staff of a professional doctoral study programme in arts (if applicable).

Assessment of compliance: Not relevant

Not relevant

- 8 8 - The teaching staff members involved in the implementation of the study programme are proficient in the official language in accordance with the regulations on the level of the official language knowledge and the procedures for testing official language proficiency for performing professional duties and office duties.

Assessment of compliance: Fully compliant

The academic staff has sufficient Latvian language knowledge for implementing study courses, see annex : Basic information about the teaching staff involved in the implementation of the study field No.9.

- 9 9 - The teaching staff members to be involved in the implementation of the study programme have at least B2-level knowledge of a related foreign language, if the study programme or any part thereof is to be implemented in a foreign language (if applicable).

Assessment of compliance: Fully compliant

The academic staff has sufficient foreign language knowledge for implementing study courses, see annex : Basic information about the teaching staff involved in the implementation of the study field No.9. However, it should be noted that there is concern over elected academic personnel presenting Kīmi1038 study course for bachelor students, however, she has B2-level language skills in French and only A2 language level skills in English. Since it is planned to implement a study programme in the English language, it is recommended for this person achieve B2-level knowledge in the English language.

- 10 10 - The sample of the study agreement complies with the mandatory provisions to be included in the study agreement.

Assessment of compliance: Fully compliant

Study agreements include all necessary parts set in legislation. See the annex: Standard sample of study agreement No.7.

It is advised to include information about guarantees of compensation losses (11. and 12. criteria), so that this information is easier for the students to acknowledge already from the beginning.

- 11 11 - The higher education institution / college has provided confirmation that students will be provided with opportunities to continue their education in another study programme or another higher education institution or college (agreement with another accredited higher education institution or college) if the implementation of the study programme is terminated.

Assessment of compliance: Fully compliant

University has a record order as confirmation that in case the implementation of this study programme is terminated students will be able to continue studies in UL academic bachelor study programme "Environmental Science". See annex: A copy of a document certifying that the higher education institution will provide students with opportunities to continue their education in another study programme No. 5.

- 12 12 - The higher education institution / college has provided confirmation that students are guaranteed compensation for losses if the study programme is not accredited or the study programme's license is revoked due to the actions (actions or omissions) of the higher education institution or college and the student does not wish to continue studies in another study programme.

Assessment of compliance: Fully compliant

University has a rectors order, that confirms it will compensate losses to students if the study programme is not accredited or loses its license and the student does not wish to continue studies in another study programme. See annex: A copy of a document certifying that the higher education institution guarantees compensation for losses to students No. 6. It is advised to include this information in the study agreement.

- 13 13 - The joint study programmes comply with the requirements prescribed in Section 55.(1), Paragraphs one, two, and seven of the Law on Higher Education Institutions (if applicable)

Assessment of compliance: Not relevant

Not relevant

- 14 14 - Compliance with the requirements specified in other regulatory enactments that apply to the study programme being assessed (if applicable)

Assessment of compliance: Not relevant

Not relevant

Assessment of the requirement [8]

- 1 R8 - Compliance of the study programme with the requirements set forth in the Law on Higher Education Institutions and other regulatory enactments.

Assessment of compliance: Fully compliant

The requirement has been met and fulfilled, and all requirements set in different regulatory enactments are satisfied.

General conclusions about the study programme, indicating the most important strengths and weaknesses of the study programme

The goal of the study programme is in line with the goal of the study field and it is to provide students with high-quality theoretical knowledge and research skills in the field of Geography. The content of the courses corresponds with the programme outcomes. According to the stakeholders, the outcomes of the study programme meet the needs of the labour market. BSP Geography has good infrastructural prerequisites with well-equipped laboratories and a library that is open 24/7. The qualifications and the number of the teaching staff are in line with regulatory enactments. The scientific and professional activities of the teaching staff have a positive effect on the teaching process.

Strengths:

Graduates are recognized in the market and are valued as workers with a good theoretical background and developed ability to learn.

Strong academic teaching staff.

Strong alumni solidarity and cooperation.

Good infrastructural prerequisites.

The scientific and professional activities of the teaching staff have a positive effect on the teaching process.

Weaknesses:

The low number of graduates in comparison to the number of students enrolled.

The low number of international mobility of lecturers.

Evaluation of the study programme "Geography"

Evaluation of the study programme:

Excellent

2.6. Recommendations for the Study Programme "Geography"

Short-term recommendations

To ensure clear evidence about the continuity of updates to the programme.

Long-term recommendations

To lower student dropout rates optimize the study field management (together with the study programme management) in terms of study organization

Encourage lectures to participate in outgoing mobilities by rebalancing their workload at the Faculty, especially in teaching.

To ensure the procedure of regular study course literature update, especially in study course descriptions.

II - "Geology" ASSESSMENT

II - "Geology" ASSESSMENT

2.1. Indicators Describing the Study Programme

Analysis

The title "Geology" and the degree to be obtained "Bachelor of Natural Sciences in Geology", show that the program seeks to train graduates with theoretical knowledge and research skills in the field of Geology. The goal of the study program is in line with the purpose of the study field: it is composed in a way that provides students with fundamental knowledge of the entire field of geology as well as basic natural science courses.

The program code 43442 is correctly designed and corresponds to the regulations (Regulation of the Cabinet of Ministers of June 13, 2017 no. 322 "Regulations on the classification of education in Latvia"): the first two digits of the program code indicate the Academic Bachelor's degree, while the third to fifth digits (442) correspond to the Geography and Earth Sciences study field. The programme complies with the 6th professional qualification level.

The program code matches the other program parameters. The aim of the program (is "to provide students with opportunities to acquire a systematic knowledge of the fundamentals of geology and related natural sciences, to acquire initial specialization in bed-rock geology, applied geology and

Quaternary geology and geomorphology, to develop erudition and practical skills to meet the requirements of the labour market and to continue their studies at master's level"), objectives, results, and the content, given in the description of the program correspond to its title, code, and the degree to be obtained. The duration of the program (3 years of full-time studies) is justified and corresponds to the Bologna Declaration.

Minor changes were introduced to BSP Geology in order to improve the quality of the programme. Study outcomes were rewritten to comply with the knowledge-skills-competencies frame. As confirmed both by the director and the employers some learning outcomes were consolidated in

discussion with employers.

BSP Geology is the only programme for obtaining a bachelor's degree in Geology at the University of Latvia and therefore its existence is justified. More or less all bachelors continue their study at the master's level while at the same time majority of them work as a bachelor's of geology both in private and in the public sector. According to both employers and graduates, there is a constant demand for geologists as well as for other natural science experts in the labour market. According to the data, demand is higher than the number of graduates. With the ongoing energy crisis, it is expected that the need for experts in the field of geology will continue to grow especially in the field of natural resources, energy resources, climate change etc. At the same time, the number of students at the BSP is falling. In the year 2021, only 21 students enrolled on the programme. Also worrying is the fact that the number of students graduating in the reporting period is much lower than the number of students enrolled. Partly it could be due to the pandemic and online learning but this should be looked into and analysed in more detail.

Conclusions on this set of criteria, by specifying strengths and weaknesses

The BSP in Geology is the only programme of that kind offered in Latvia and therefore is a necessary one to obtain. The goal of the study programme is in line with the goal of the study field and it is to provide students with high-quality theoretical knowledge and research skills in the field of Geology. The study program is being developed taking into account the requirements of previous accreditation and emerging challenges. Graduates are employed both in the private and governmental sectors. Graduates of this programme have a good theoretical background, can work independently and most important have developed the ability to acquire new knowledge and skills. Unfortunately, the number of students at the BSP is falling, and the number of students graduating in the reporting period is much lower than the number of students enrolled.

Strength

BSP Geology is the only programme of that kind at UL.

The labour market recognizes the bachelor of geology and there is a demand for them.

Weakness

The low number of graduates in comparison to the number of students enrolled.

A sharp drop in the number of students enrolled in the first year of the study programme.

2.2. The Content of Studies and Implementation Thereof

Analysis

BSP Geology is realized in full-time (3 years; 120 CP) studies. Studies are conducted in Latvian and English. The purpose of the BSP Geology study programme is to provide students with the opportunity to acquire a systematic knowledge of the basics of geology and related natural sciences, to obtain an initial specialization in bedrock geology, applied geology and Quaternary geology and geomorphology, which is realized by the interconnection and succession of study courses. BSP Geology is implemented by achieving study results and graduates demonstrating knowledge, skills and competencies in the theoretical and practical framework of geology.

The composition of the study courses corresponds to the objectives of the programme and contributes to the achievement of learning outcomes. With a fair number of practical courses, i.e. Geological field techniques etc. programme meets the needs of the labour market. This was confirmed by both graduates and employers at the interviews.

Course and the year of study determine the study method used. As seen from the syllabus, in the first year of the study theoretical knowledge and practical knowledge of different scientific fields (i.e.

chemistry, physics) are gained. Also, a lot of attention throughout the programme is given to the fieldwork. Laboratory work and practical work are mostly offered in the second and third years. In the examination, both written and oral methods are used. The student is at the centre of the teaching process. A lot of attention is given to fostering students' research competencies and encouraging them to participate in research and publish and present their results.

During the pandemic, the classroom was moved to an online environment through the usage of different technologies and programmes. The E-learning environment also promoted independent studies and field works during the pandemic and became an integral part of the learning process.

Over the past five years, 43 theses were defended at BSP Geology covering different disciplines of the field. Students are encouraged to do their thesis as a part of a research project. The majority of the thesis was graded with grades 7 or 8, followed by grades 9 and 10.

Conclusions on this set of criteria, by specifying strengths and weaknesses

BSP Geology prepares specialists who have knowledge, skills and competencies for the rational use of Earth's resources in Latvia and abroad.

Strength

A good proportion of theoretical and practical courses.

Good adaptation to the online environment. Harmonious involvement of young lecturers in the study process

Weakness

Students spend relatively little time in the library because they often work outside of their studies.

Assessment of the requirement [5] (applicable only to master's or doctoral study programmes)

- 1 R5 - The study programme for obtaining a master's or doctoral degree is based on the achievements and findings of the respective field of science or field of artistic creation.

Assessment of compliance: Not relevant

not relevant

2.3. Resources and Provision of the Study Programme

Analysis

BSP Geology has good infrastructural prerequisites. Laboratories are well-equipped and open for students. The library is located in the House of Nature with a vast selection of online sources available on-site and remotely. The material and technical provisions are renewed every year. The acquisition of new equipment focuses on the development of applied geology and remote sensing techniques. Different tools and equipment were acquired over the past couple of years which are needed for successful teaching in the courses.

The state covers the student expenses through the tuition fee in the amount of 3097 € per student per year. Additional funds are obtained through projects and contracts with employers.

Conclusions on this set of criteria, by specifying strengths and weaknesses

BSP is adequately provided for the implementation of the study process with a full spectrum of material and technical equipment. The material and technical base is regularly renewed. Classes are

held in modern and well-equipped classrooms.

Strength

Good working environment.

Available online resources for on-site and remote work from home.

Well equipped laboratories.

Weakness

No.

Assessment of the requirement [6]

- 1 R6 - Compliance of the study provision, science provision (if applicable), informative provision (including library), material and technical provision and financial provision with the conditions for the implementation of the study programme and ensuring the achievement of learning outcomes

Assessment of compliance: Fully compliant

The material, technical and financial provision enables the successful implementation of the study programme.

2.4. Teaching Staff

Analysis

With 10 professors and associate professors in the study programme structure of the teaching staff according to election is in line with regulatory enactment (Article 55). Research activities of the teaching staff are related to their courses which has a positive impact on the study process. This is confirmed by students who state that teachers often encourage them to participate in different scientific projects. The research activities during courses enable both students' and teachers' insight into the latest research results.

The total number of teachers in the last five years slightly increased due to the new elections of the teaching staff. In 2016 there were 20 professors, associate professors and assistant professors. In 2022 that number was raised by 2 elected professors. At the same time, doctoral students are also involved in the study process which was confirmed by both the director of the programme and the students.

As confirmed by the teaching staff and director at the interview the cooperation among teaching staff is good and any misunderstandings are dealt with at the local level of the Department. Meetings of the staff are held regularly. The student-teaching staff ratio is 1.5-2.1 students per teacher. Students confirm the positive effect of several teachers teaching one course.

Conclusions on this set of criteria, by indicating strengths and weaknesses

The structure of the qualification of the teaching staff ensures the implementation of the study programme. Research activities of the teaching staff are related to their courses which has a positive impact on the study process. Students have confirmed the positive effect of several teachers teaching one course.

Strength

Renewal of the teaching staff.

Academically and practically powerful teaching staff.

Weakness

Teaching staff rarely use international mobility options.

Assessment of the requirement [7]

- 1 R7 - Compliance of the qualification of the academic staff and visiting professors, visiting associate professors, visiting docents, visiting lecturers and visiting assistants with the conditions for the implementation of the study programme and the requirements set out in the respective regulatory enactments.

Assessment of compliance: Fully compliant

The teaching staff is qualified for the implementation of the study programme. However, the number of incoming and outgoing mobilities is low.

2.5. Assessment of the Compliance

Requirements

- 1 1 - The study programme complies with the State Academic Education Standard or the Professional Higher Education Standard

Assessment of compliance: Fully compliant

Study programme Geology (43442) complies with the State Academic Education Standard (Cabinet of Ministers No. 240).

The study programme Geoinformatics volume is 120CP of which 74 CP are a compulsory part, including 10CP for the Bachelor thesis, 42 CP for the elective compulsory part and 4CP for the free elective part.

Compliance with the study programme with the State Education Standard is described in Annex No 38.

- 2 2 - The study programme complies with a valid professional standard or the requirements for the professional qualification (if there is no professional standard required for the relevant occupation) provided if the completion of the study programme leads to a professional qualification (if applicable)

Assessment of compliance: Not relevant

Not relevant

- 3 3 - The descriptions of the study courses and the study materials have been prepared in all languages in which the study programme is implemented, and they comply with the requirements set forth in Section 561 , Paragraph two and Section 562 , Paragraph two of the Law on Higher Education Institutions.

Assessment of compliance: Fully compliant

Study course descriptions and study materials are prepared in Latvian and English languages, and they satisfy requirements set in Law on Higher Education Institutions. However, Faculty management must make sure that lecturers update study course descriptions with literature up to date regularly (at least once per year or once every two years). It should be noted that some A and B part study course descriptions have compulsory literature dating from 2000.-2010. year period and they could be considered a bit outdated.

- 4 4 - The sample of the diploma to be issued for the acquisition of the study programme complies with the procedure according to which state recognised documents of higher education are issued.

Assessment of compliance: Fully compliant

The diploma issued complies with the state legislature and "Procedures by which documents certifying higher Education recognised by the State shall be issued" (Cabinet of Ministers No. 202). See annex: Standard sample of study agreement Annex No. 7.

- 5 5 - The academic staff of the academic study programme complies with the requirements set forth in Section 55, Paragraph one, Clause 3 of the Law on Higher Education Institutions.

Assessment of compliance: Fully compliant

There are at least 5 asoc. professors or professors involved in the study programme implementation together. See annex: Certification that academic staff of the academic study programme "Geology" bachelor complies with the requirements laid down in section 55 No.11.

- 6 6 - Academic study programmes provided for less than 250 full-time students may be implemented and less than five professors and associated professors of the higher education institution may be involved in the implementation of the mandatory and limited elective part of these study programmes provided that the relevant opinion of the Council for Higher Education has been received in accordance with Section 55, Paragraph two of the Law on Higher Education Institutions.

Assessment of compliance: Fully compliant

This criterion is met and AIP has approved the implementation of the study programme. See annex: Council of Higher education Opinion Brief No. 36.

- 7 7 - At least five teaching staff members with a doctoral degree are among the academic staff of an academic doctoral study programme, at least three of which are experts approved by the Latvian Science Council in the respective field of science. At least five teaching staff members with a doctoral degree are among the academic staff of a professional doctoral study programme in arts (if applicable).

Assessment of compliance: Not relevant

Not relevant

- 8 8 - The teaching staff members involved in the implementation of the study programme are proficient in the official language in accordance with the regulations on the level of the official language knowledge and the procedures for testing official language proficiency for performing professional duties and office duties.

Assessment of compliance: Fully compliant

The academic staff has sufficient Latvian language knowledge for implementing study courses, see annex : Basic information about the teaching staff involved in the implementation of the study field No.9.

- 9 9 - The teaching staff members to be involved in the implementation of the study programme have at least B2-level knowledge of a related foreign language, if the study programme or any part thereof is to be implemented in a foreign language (if applicable).

Assessment of compliance: Fully compliant

The academic staff has sufficient foreign language knowledge for implementing study courses, see annex : Basic information about the teaching staff involved in the implementation of the study field No.9. However, it should be noted that there is concern over elected academic personnel presenting Ķīmi1038 study course for bachelor students, however, she has B2-level language skills in French and only A2 language level skills in English. Since it is planned to implement a study programme in the English language, it is recommended for this person

achieve B2-level knowledge in the English language.

- 10 10 - The sample of the study agreement complies with the mandatory provisions to be included in the study agreement.

Assessment of compliance: Fully compliant

Study agreements include all necessary parts set in legislation. See the annex: Standard sample of study agreement No.7.

It is advised to include information about guarantees of compensation losses (11. and 12. criteria) so that this information is easier for the students to acknowledge already from the beginning.

- 11 11 - The higher education institution / college has provided confirmation that students will be provided with opportunities to continue their education in another study programme or another higher education institution or college (agreement with another accredited higher education institution or college) if the implementation of the study programme is terminated.

Assessment of compliance: Fully compliant

University has a record order as confirmation that in case the implementation of this study programme is terminated students will be able to continue studies in UL academic bachelor study programme "Geography". See annex: A copy of a document certifying that the higher education institution will provide students with opportunities to continue their education in another study programme No. 5.

- 12 12 - The higher education institution / college has provided confirmation that students are guaranteed compensation for losses if the study programme is not accredited or the study programme's license is revoked due to the actions (actions or omissions) of the higher education institution or college and the student does not wish to continue studies in another study programme.

Assessment of compliance: Fully compliant

University has a rector's order that confirms it will compensate losses to students if the study programme is not accredited or loses its license and the student does not wish to continue studies in another study programme. See annex: A copy of a document certifying that the higher education institution guarantees compensation for losses to students No. 6. It is advised to include this information in the study agreement.

- 13 13 - The joint study programmes comply with the requirements prescribed in Section 55.(1), Paragraphs one, two, and seven of the Law on Higher Education Institutions (if applicable)

Assessment of compliance: Not relevant

- 14 14 - Compliance with the requirements specified in other regulatory enactments that apply to the study programme being assessed (if applicable)

Assessment of compliance: Not relevant

Assessment of the requirement [8]

- 1 R8 - Compliance of the study programme with the requirements set forth in the Law on Higher Education Institutions and other regulatory enactments.

Assessment of compliance: Fully compliant

The requirement has been met and fulfilled, and all requirements set in different regulatory enactments are satisfied.

General conclusions about the study programme, indicating the most important strengths and weaknesses of the study programme

The goal of the study programme is in line with the goal of the study field and it is to provide students with high-quality theoretical knowledge and research skills in the field of Geology. The composition of the study courses corresponds to the objectives of the programme and contributes to the achievement of learning outcomes. Classes are held in modern and well-equipped classrooms.

Strengths:

The labour market recognizes the bachelor of geology and there is a demand for them.

Good adaptation to the online environment.

Harmonious involvement of young lecturers in the study process.

The structure of the qualification of the teaching staff ensures the implementation of the study programme.

Weaknesses:

Low number of students.

Teaching staff rarely use international mobility options.

Evaluation of the study programme "Geology"

Evaluation of the study programme:

Excellent

2.6. Recommendations for the Study Programme "Geology"

Short-term recommendations

Put extra effort into participating in different student fairs both in Latvia and abroad.

Encourage students to spend more time in the library by giving them specific tasks which would ensure that they have to spend some time there in search of the data.

Long-term recommendations

Encourage teachers to participate in outgoing mobilities by rebalancing their workload at the Faculty, especially in teaching.

To ensure the procedure of regular study course literature update, especially in study course descriptions.

II - "Geography" ASSESSMENT

II - "Geography" ASSESSMENT

2.1. Indicators Describing the Study Programme

Analysis

The title "Geography" and the degree to be obtained "Academic Master of Natural Sciences in Geography", show that the program seeks to train graduates with advanced knowledge and research skills in the field of Geography. The goal of the study program is in line with the purpose of

the study field: it is based on the achievements and findings of the respective field of science.

The program code 45442 is correctly designed and corresponds to the regulations (Regulation of the Cabinet of Ministers of June 13, 2017 no. 322 "Regulations on the classification of education in Latvia"): the first two digits of the program code indicate the Academic Master degree, while the third to fifth digits (442) correspond to the Geography and Earth Sciences study field. The programme complies with the 7th professional qualification level.

The program code matches the other program parameters. The aim of the program (is "to provide students with advanced knowledge and research skills in the theory and practice of contemporary geography, preparing them to become specialists in the integrated solution of spatial, natural and human environmental problems in academic and professional fields."), objectives, results, and the content, given in the description of the program correspond to its title, code, and the degree to be obtained. Learning outcomes in the sense of the knowledge, skills and competencies are well defined and correlate with the expected results of BSP Geography. The duration of the program (2 years of full-time studies) is justified and corresponds to the Bologna Declaration.

Admission requirements are very inclusive in the sense that everyone with a Bachelor's and or Master's degree can apply for the study programme. However, those with a degree in the field of natural science do not have to take an entrance examination while others do. Taking into account that geography includes a large part of social sciences, for students without that combination of knowledge, it is more complicated to acquire geographical competencies at the Master's level. The knowledge, skills and competencies acquired within the study correspond to the LQF 7.

Changes were made in line with the last reaccreditation. New admission criteria are more inclusive for people who graduated in the field of natural science and would like to continue their study in the field of Geography.

MSP Geography is the only master's program of that kind in Latvia and therefore its existence is needed and justified. Employer and alumni surveys show that specialists are needed in the labor market and are well-recognized and accepted. According to the survey, almost 89% of graduates are employed in the field of Geography. They work both in the public and private sectors.

Conclusions on this set of criteria, by specifying strengths and weaknesses

MSP Geography is the only master's programme of that kind in Latvia and therefore its existence is needed and justified. The goal of the study programme MSP Geography is in compliance with the study field. The aims and objectives of the study programme are in line with the goal of the study programme. Learning outcomes in the sense of the knowledge, skills and competencies are well defined and correlate with the expected results of BSP Geography. Efforts are being made to improve the program, also taking into account past accreditation.

Strength

MSP Geography is the only master's programme of that kind in Latvia. Graduates of the study program are needed in the labour market and are well-recognized and accepted.

The study programme is developed according to the needs of the market.

Weaknesses

Admission requirements allow everyone with Bachelor's and or Master's degree to apply for the study programme, unfortunately, there are special geographical knowledge and competencies required. A lack of clear criteria for competencies can harm the quality of studies.

Working in companies is the reason why students discontinue studying MSP Geography.

2.2. The Content of Studies and Implementation Thereof

Analysis

MSP Geography is implemented full-time (2 years; 80 CP). Studies can be completed in Latvian and English. MSP Geography study courses are interconnected and they ensure the fulfilment of the goals and tasks set by the study programme - to provide in-depth knowledge and research skills based on the theory and practice of modern geography, preparing specialists in the integrated solution of spatial, natural and human environmental problems in the academic and professional fields. MSP Geography is implemented by achieving study results and graduates demonstrating in-depth knowledge, skills and competencies.

Emphasis is put on research methods, practice and fieldwork. Such selection of courses is justified due to their future work and the needs of the labour market. HEI should think about making Strategic management and Project management compulsory courses. The study courses cover different sub-disciplines of contemporary geography. Choice of study courses give students a chance to gain sufficient knowledge, skill and competencies to work in different fields of work according to their preferences.

The awarding degree is based on the outcomes of the study programme with the award of Master of Natural science in Geography. At the same time, the choice of elective courses offers the possibility of specialisation in Economic and Social Geography as well.

Teaching methods based on practical work and field work offers the possibility for students to acquire practical knowledge. Interactive lectures and problem-oriented lectures give students the opportunity to participate in lectures as active participants and not just passive listeners. Practical seminars and individual research give them the opportunity to practice their future work and develop a sense of responsibility. During the COVID-19 pandemic lectures and practical work was done in an online environment. Since MOODLE was highly used even before the pandemic both students and teachers adapted quickly to the new working environment. This was confirmed both by teachers and students during the interviews. Online guides for the fieldwork were developed which gave the students the opportunity to try working in the field on their own and to develop their independence at work which will be needed and valued in their future work.

All Master's theses must be developed in accordance with UL order on the development and defence of the thesis. According to students and graduates, the choice of the topics is made on an individual preference in consultation with teaching staff. However, a thesis containing practical work and research is encouraged. The majority of these are graded with top grades.

Conclusions on this set of criteria, by specifying strengths and weaknesses

The content of the study courses is interconnected and corresponds to the objectives of the programme with the emphasis put on research methods, practice and fieldwork. The awarding degree is based on the outcomes of the study programme with the award of Master of Natural science in Geography. At the same time, the choice of elective courses offers the possibility of specialisation in another field of geography as well. Teaching methods enable students to gain practical knowledge that is in line with the market needs.

Strength

Emphasis on theoretical and methodological courses will enable students to understand and apply knowledge in their future work.

Good balance of elective courses for various geographical sub-disciplines.

Weakness

After getting acquainted with the materials and conducting a discussion with students during the

visit, it can be concluded that MSP Geography is an overloaded study process for students.

Assessment of the requirement [5] (applicable only to master's or doctoral study programmes)

- 1 R5 - The study programme for obtaining a master's or doctoral degree is based on the achievements and findings of the respective field of science or field of artistic creation.

Assessment of compliance: Fully compliant

The study programme for obtaining a master's degree is based on the achievements and findings of the respective field of science.

2.3. Resources and Provision of the Study Programme

Analysis

MSP Geography has good infrastructural prerequisites. Laboratories are well-equipped and open for students. The library is open 24/7 with a selection of online sources available on-site and remotely. The number of printed on-site books is a little scarce but those obtained are up-to-date with current trends in geography research. The material and technical provisions are renewed every year. A state budget subsidy is 4646€ per student per year and the tuition fee is set to 2000 € per student. According to the director of the programme, HEI has sufficient resources to implement the study programme.

Conclusions on this set of criteria, by specifying strengths and weaknesses

The material, technical and financial provision ensures the successful implementation of the study programme. The profitability of the programme is set to 50 students or 33 budget students.

Strength

Good infrastructure prerequisite for the implementation of the study programme.

Availability of both offline and online resources.

Weaknesses

The study programme is not visible enough for future students.

Assessment of the requirement [6]

- 1 R6 - Compliance of the study provision, science provision (if applicable), informative provision (including library), material and technical provision and financial provision with the conditions for the implementation of the study programme and ensuring the achievement of learning outcomes

Assessment of compliance: Fully compliant

HEI has good infrastructural prerequisites for the successful implementation of the study program. Financial provision is sufficient to ensure quality teaching work.

2.4. Teaching Staff

Analysis

The qualifications and number of teaching staff meet the requirements set out in regulatory

documents and create confidence that they will ensure the achievement of the results set by MSP "Geography". During the visit with the lecturers of the study program, the experts received confirmation that the LU provides training for the qualification of teaching staff and the purchase of the necessary literature. The teaching staff is specialized in various subfields of geography (natural geography, environmental and regional geography, human geography, applied geography and geomatics), as well as in other branches of science (geology and environmental science), which determine the possibility of providing students with the latest scientific knowledge and up-to-date practical skills in a wide range of natural sciences.

The qualification of the teaching staff has increased significantly and the composition of the teaching staff has improved.

In order to promote improvement and interconnection of study courses, mutual cooperation of teaching staff takes place regularly. In many cases, several faculty members jointly teach one course. The cooperation of the teaching staff is also encouraged by the program management, which discusses and coordinates the study process.

Conclusions on this set of criteria, by indicating strengths and weaknesses

UL systematically supports the involvement of teaching staff in various local or international projects that strengthen scientific and practical cooperation and knowledge transfer.

Strength

Mutual communication between lecturers is organized, thereby strengthening the quality level of MSP "Geography".

A harmonious renewal of the academic and scientific staff is underway.

Weaknesses

Low level of international mobility.

Assessment of the requirement [7]

- 1 R7 - Compliance of the qualification of the academic staff and visiting professors, visiting associate professors, visiting docents, visiting lecturers and visiting assistants with the conditions for the implementation of the study programme and the requirements set out in the respective regulatory enactments.

Assessment of compliance: Fully compliant

The teaching staff is qualified for the implementation of the study program.

2.5. Assessment of the Compliance

Requirements

- 1 1 - The study programme complies with the State Academic Education Standard or the Professional Higher Education Standard

Assessment of compliance: Fully compliant

Study programme Geography (45442) complies with the State Academic Education Standard (Cabinet of Ministers No. 240).

The study programme Geography volume is 80CP of which 44 CP are for the compulsory part, 32 CP are for the elective compulsory part, 4CP for the free elective part and 20CP for the Master

thesis.

Compliance with the study programme with the State Education Standard is described in Annex No 31.

- 2 2 - The study programme complies with a valid professional standard or the requirements for the professional qualification (if there is no professional standard required for the relevant occupation) provided if the completion of the study programme leads to a professional qualification (if applicable)

Assessment of compliance: Not relevant

Not relevant

- 3 3 - The descriptions of the study courses and the study materials have been prepared in all languages in which the study programme is implemented, and they comply with the requirements set forth in Section 561 , Paragraph two and Section 562 , Paragraph two of the Law on Higher Education Institutions.

Assessment of compliance: Fully compliant

Study course descriptions and study materials are prepared in Latvian and English languages, and they satisfy requirements set in Law on Higher Education Institutions. However, Faculty management must make sure that lecturers update study course descriptions with literature up to date regularly (at least once per year or once every two years). It should be noted that some A and B part study course descriptions have compulsory literature dating from 2000.-2010. year period and they could be considered a bit outdated.

- 4 4 - The sample of the diploma to be issued for the acquisition of the study programme complies with the procedure according to which state recognised documents of higher education are issued.

Assessment of compliance: Fully compliant

The diploma issued complies with the state legislature and “Procedures by which documents certifying higher Education recognised by the State shall be issued” (Cabinet of Ministers No. 202). See annex: Standard sample of study agreement Annex No. 7.

- 5 5 - The academic staff of the academic study programme complies with the requirements set forth in Section 55, Paragraph one, Clause 3 of the Law on Higher Education Institutions.

Assessment of compliance: Fully compliant

There are at least 5 associated professors or professors involved in the study programme implementation together. See annex: Certification that academic staff of the academic master study programme “Geography” complies with the requirements laid down in section 55 No.11.

- 6 6 - Academic study programmes provided for less than 250 full-time students may be implemented and less than five professors and associated professors of the higher education institution may be involved in the implementation of the mandatory and limited elective part of these study programmes provided that the relevant opinion of the Council for Higher Education has been received in accordance with Section 55, Paragraph two of the Law on Higher Education Institutions.

Assessment of compliance: Fully compliant

This criterion is met and AIP has approved the implementation of the study programme. See annex: Council of Higher education Opinion Brief No. 29

- 7 7 - At least five teaching staff members with a doctoral degree are among the academic staff of an academic doctoral study programme, at least three of which are experts approved by the Latvian Science Council in the respective field of science. At least five teaching staff members with a doctoral degree are among the academic staff of a professional doctoral study programme in arts (if applicable).

Assessment of compliance: Not relevant

Not relevant

- 8 8 - The teaching staff members involved in the implementation of the study programme are proficient in the official language in accordance with the regulations on the level of the official language knowledge and the procedures for testing official language proficiency for performing professional duties and office duties.

Assessment of compliance: Fully compliant

The academic staff has sufficient Latvian language knowledge for implementing study courses, see annex : Basic information about the teaching staff involved in the implementation of the study field No.9.

- 9 9 - The teaching staff members to be involved in the implementation of the study programme have at least B2-level knowledge of a related foreign language, if the study programme or any part thereof is to be implemented in a foreign language (if applicable).

Assessment of compliance: Fully compliant

The academic staff has sufficient foreign language knowledge for implementing study courses, see annex : Basic information about the teaching staff involved in the implementation of the study field No.9.

- 10 10 - The sample of the study agreement complies with the mandatory provisions to be included in the study agreement.

Assessment of compliance: Fully compliant

Study agreements include all necessary parts set in legislation. See the annex: Standard sample of study agreement No.7.

It is advised to include information about guarantees of compensation losses (11. and 12. criteria) so that this information is easier for the students to acknowledge already from the beginning.

- 11 11 - The higher education institution / college has provided confirmation that students will be provided with opportunities to continue their education in another study programme or another higher education institution or college (agreement with another accredited higher education institution or college) if the implementation of the study programme is terminated.

Assessment of compliance: Fully compliant

University has a record order as confirmation that in case the implementation of this study programme is terminated students will be able to continue studies in UL academic master study programme "Environmental Science". See annex: A copy of a document certifying that the higher education institution will provide students with opportunities to continue their education in another study programme No. 5.

- 12 12 - The higher education institution / college has provided confirmation that students are guaranteed compensation for losses if the study programme is not accredited or the study programme's license is revoked due to the actions (actions or omissions) of the higher education institution or college and the student does not wish to continue studies in another study programme.

Assessment of compliance: Fully compliant

University has a rector's order, that confirms it will compensate losses to students if the study programme is not accredited or loses its license and the student does not wish to continue studies in another study programme. See annex: A copy of a document certifying that the higher education institution guarantees compensation for losses to students No. 6. It is advised to include this information in the study agreement.

- 13 13 - The joint study programmes comply with the requirements prescribed in Section 55.(1), Paragraphs one, two, and seven of the Law on Higher Education Institutions (if applicable)

Assessment of compliance: Not relevant

Not relevant

- 14 14 - Compliance with the requirements specified in other regulatory enactments that apply to the study programme being assessed (if applicable)

Assessment of compliance: Not relevant

Not relevant

Assessment of the requirement [8]

- 1 R8 - Compliance of the study programme with the requirements set forth in the Law on Higher Education Institutions and other regulatory enactments.

Assessment of compliance: Fully compliant

The requirement has been met and fulfilled, and all requirements set in different regulatory enactments are satisfied.

General conclusions about the study programme, indicating the most important strengths and weaknesses of the study programme

The goal of the study programme MSP Geography is in compliance with the study field. The aims and objectives of the study programme are in line with the goal of the study programme. The content of the study courses is interconnected and corresponds to the objectives of the programme. Emphasis is put on research methods, practice and fieldwork. MSP Geography has good infrastructural prerequisites. Laboratories are well-equipped and open for students. The library is open 24/7 with a selection of online sources available on-site and remotely. LU systematically supports the involvement of teaching staff in various local or international projects that strengthen scientific and practical cooperation and knowledge transfer.

Strengths:

Emphasis on theoretical and methodological courses will enable students to understand and apply knowledge in their future work.

Good infrastructure prerequisite for the implementation of the study programme.

Availability of both offline and online resources.

Weaknesses:

Low admission criteria can result in a lack of competencies for students with non-geographical backgrounds and can harm the quality of studies.

The study programme is not visible enough for future students.

Low level of international mobility for academic staff.

Evaluation of the study programme "Geography"

Evaluation of the study programme:

Excellent

2.6. Recommendations for the Study Programme "Geography"

Short-term recommendations

Invest in advertisements in order to attract future students.

Long-term recommendations

More clearly define the admission requirements for those entering the study program, in terms of special geographical knowledge and competencies required.

Communicate with both students and employers the importance of finishing their studies.

Participate at different student fairs both in Latvia and abroad.

Ensure the procedure of regular study course literature updates, especially in study course descriptions.

II - "Geology" ASSESSMENT

II - "Geology" ASSESSMENT

2.1. Indicators Describing the Study Programme

Analysis

The title "Geology" and the degree to be obtained "Academic Master of Natural Sciences in Geology", show that the program seeks to train graduates with advanced knowledge and research skills in the field of Geology. The goal of the study program is in line with the purpose of the study field and is based on the achievements and findings of the respective field of science

The program code 45442 is correctly designed and corresponds to the regulations (Regulation of the Cabinet of Ministers of June 13, 2017 no. 322 "Regulations on the classification of education in Latvia"): the first two digits of the program code indicate the Academic Master degree, while the third to fifth digits (442) correspond to the Geography and Earth Sciences study field. The programme complies with the 7th professional qualification level.

The program code matches the other program parameters. The aim of the program (is "to provide academic education in geology, gaining modern theoretical and methodological knowledge in such subsectors of geology as Quaternary geology and geomorphology, applied geology and bedrock geology, developing skills in research work and promoting the strengthening of practical skills required in the labour market"), objectives, results, and the content, given in the description of the program correspond to its title, code, and the degree to be obtained. Learning outcomes in the sense of the knowledge, skills and competencies are well defined and correlate with the expected results of BSP Geology. The duration of the program (2 years of full-time studies) is justified and corresponds to the Bologna Declaration.

Admission requirements are very inclusive in the sense that everyone with a Bachelor's and or Master's degree can apply for the study program. However, those with a degree in the field of natural science do not have to take an entrance examination while others do. The knowledge, skills

and competencies acquired within the study correspond to the LQF 7.

Changes were made in line with the last reaccreditation: matriculation requirements are differentiated depending on the field of previous education. If such education has been obtained in other fields, an entrance exam is organized.

MSP Geology is the only master's program of that kind in Latvia and therefore its existence is needed and justified. Employer and alumni surveys show that specialists are needed in the labour market and are well-recognized and accepted. According to the survey, almost 72% of graduates are employed in the field of Geology. They work both in the public and private sectors.

Conclusions on this set of criteria, by specifying strengths and weaknesses

MSP Geology is the only master's programme of that kind in Latvia and therefore its existence is needed and justified. The goal of the study programme MSP Geology is in compliance with the study field. The aims and objectives of the study programme are in line with the goal of the study programme. Learning outcomes in the sense of the knowledge, skills and competencies are well defined and correlate with the expected results of BSP Geology. Efforts are being made to improve the programme, also taking into account past accreditation.

Strength

MSP Geology is the only master's programme of that kind in Latvia. Graduates of the study program are needed in the labour market and are well-recognized and accepted.

The study programme is developed according to the needs of the labour market.

Weaknesses

Admission requirements allow everyone with Bachelor's and or Master's degree to apply for the study program, unfortunately, there are special geological knowledge and competencies required. A lack of competencies can harm the quality of studies.

2.2. The Content of Studies and Implementation Thereof

Analysis

MSP "Geology" consists of parts A, B and C, which respectively make up 65%, 30% and 5% of the total amount of credit points. Part A (total of 52 CP) consists of a master's thesis (20 CP) and study courses (total of 32 CP). The goals, tasks and achievable results of the study courses provide that the graduates of the program know how to independently collect, analyze, use and communicate geological information, choose and practically apply the necessary geological research methods in order to carry out research activities or the functions of a geologist at a high professional level. The content of the study courses is designed according to the requirements of the labour market. It meets these requirements both in the business sphere, in state and local government institutions, and also in research work. The lecturers of the study courses are actively involved in research, which is evidenced by their academic and scientific qualifications, as well as the list of publications.

The awarding of the Master of Science degree in geology is based on the achievements and findings of the field of geological science and Earth sciences. As well as, the courses of all sub-branches of geology defined in Latvia, as well as the most relevant areas globally characteristic of the branch, are studied. Lecturers with a doctor's degree, mostly in geology, in some cases in geography, chemistry and mathematics, take part in the implementation of the study program. The obtained scientific degrees and research areas confirm the ability of lecturers to provide students with

courses based on the latest achievements and findings of the scientific field, as well as the fact that the awarded Master of Science degree in geology is based on the achievements of the relevant scientific field.

Both oral, written and combined study and evaluation methods are used during the study and examinations of MSP Geology study courses. Professionals from private companies and state institutions are invited to teach individual lectures in study courses. In order for students to achieve their study results - acquire and strengthen knowledge, and skills and develop competence - the study process is dominated by methods in which student activity is important. Students are involved in academic staff-initiated research and social activities in the community. Students are introduced to the procedure for submitting suggestions and resolving complaints at the beginning of their studies.

From 2016 to 2021 36 master's theses have been developed in the field of geology, of which 13 are in applied geology, 11 are in bedrock geology, 6 are in Quaternary geology, and 6 on two sub-branches of geology at the same time (bedrock geology and applied geology; Quaternary geology and geomorphology, and applied geology). This means that the sub-branches of geology are represented relatively evenly, as well as the use of topics and methodologies of different sub-branches of geology in one work is positively evaluated.

Conclusions on this set of criteria, by specifying strengths and weaknesses

The content of MSP Geology study courses is coordinated with each other and ensures the achievement of the results of the study program, as well as meets the needs of employers. The courses complement each other and their sequence creates a logical program. MSP Geology's content is current and in line with industry trends. The program is well balanced

Strength

MSP Geology's content is current and in line with industry trends. The program is well-balanced. Course descriptions are clear, logical and professionally prepared. Good cooperation with industry representatives and employers.

Weaknesses

Students rarely use the library.

Assessment of the requirement [5] (applicable only to master's or doctoral study programmes)

- 1 R5 - The study programme for obtaining a master's or doctoral degree is based on the achievements and findings of the respective field of science or field of artistic creation.

Assessment of compliance: Fully compliant

The study programme for obtaining a master's degree is based on the achievements and findings of the respective field of science.

2.3. Resources and Provision of the Study Programme

Analysis

MSP Geology has good infrastructural prerequisites. The informative provision includes a library that is well-equipped and available to students and the teaching staff. Laboratories are well equipped. The material and technical provisions are renewed every year. The acquisition of new equipment

focuses on the development of applied geology and remote sensing techniques.

Funding is ensured through the state budget grant in the amount of EUR 1630. The state budget subsidy is EUR 4646 per student. The tuition fee is set to EUR 2000. The costs of the study programme are calculated based on the methodology developed by the University of Latvia and take into account the cost of the study process. The minimum number of students to ensure profitability is 20 students, and there are 14 students currently enrolled on the programme.

Conclusions on this set of criteria, by specifying strengths and weaknesses

MSP Geology has good infrastructural prerequisites. The library is well equipped with relevant literature including access to online databases on-site and remotely. The state budget covers the necessary expenses for the implementation of the study program. However, the number of students enrolled is too low and should aim to be at least 20 students per year.

Strength

Good infrastructural prerequisites include well-equipped laboratories and a library.

Weaknesses

The low number of students enrolled raises a question about the profitability of the study programme.

Assessment of the requirement [6]

- 1 R6 - Compliance of the study provision, science provision (if applicable), informative provision (including library), material and technical provision and financial provision with the conditions for the implementation of the study programme and ensuring the achievement of learning outcomes

Assessment of compliance: Fully compliant

The material, technical and financial provision ensures full implementation of the study programme and achievement of the learning outcomes.

2.4. Teaching Staff

Analysis

The study programme is implemented by 17 members of the teaching staff, all with PhD degrees and one lecturer with a master's degree. 91% per cent of teachers are elected at the UL. The total number of professors and associate professors is in line with the Law on Higher education Institutions. Such structure of the teaching staff enables the achievement of the aims and learning outcomes set by the programme.

When considering the composition of the teaching staff and their changes one can conclude that a certain number of teachers have advanced in their position. Data available in table 32 also shows that there was a „change of generations“ over this last reporting period. At the same time, this has not affected the study programme or its quality.

Since 46% per cent of study courses is conducted by more than one teacher and at the interviews, there were no complaints about that either from students or teachers one could conclude the others is in general good cooperation among teaching staff. Members of the teaching staff also collaborate on publications, joint fieldwork and laboratory work.

Conclusions on this set of criteria, by indicating strengths and weaknesses

The structure of the teaching staff, with 9 full-time professors and associate professors enables the achievement of the aims and learning outcomes set by the programme. The teaching staff works closely together both in scientific and teaching work. 46% of all courses are taught by more than one teacher. Cooperation is also present in the field work and collaboration on joint papers.

Strength

The balanced structure of the teaching staff with a large number of young assistant professors.

Weaknesses

Few mobility activities for teaching staff within the framework of ERASMUS.

Assessment of the requirement [7]

- 1 R7 - Compliance of the qualification of the academic staff and visiting professors, visiting associate professors, visiting docents, visiting lecturers and visiting assistants with the conditions for the implementation of the study programme and the requirements set out in the respective regulatory enactments.

Assessment of compliance: Fully compliant

The structure of the teaching staff is balanced with the highest number of teachers elected to the position of associate professor.

2.5. Assessment of the Compliance

Requirements

- 1 1 - The study programme complies with the State Academic Education Standard or the Professional Higher Education Standard

Assessment of compliance: Fully compliant

Study programme Geology (45442) complies with the State Academic Education Standard (Cabinet of Ministers No. 240).

The study programme Geology volume is 80CP of which 52 CP are a compulsory part, 24 CP are for an elective compulsory part, 4CP for the free elective part and 20CP for a Master thesis. Compliance with the study programme with the State Education Standard is described in Annex No 45.

- 2 2 - The study programme complies with a valid professional standard or the requirements for the professional qualification (if there is no professional standard required for the relevant occupation) provided if the completion of the study programme leads to a professional qualification (if applicable)

Assessment of compliance: Not relevant

Not relevant

- 3 3 - The descriptions of the study courses and the study materials have been prepared in all languages in which the study programme is implemented, and they comply with the requirements set forth in Section 561 , Paragraph two and Section 562 , Paragraph two of the Law on Higher Education Institutions.

Assessment of compliance: Fully compliant

Study course descriptions and study materials are prepared in Latvian and English languages, and they satisfy requirements set in Law on Higher Education Institutions. However, Faculty management must make sure that lecturers update study course descriptions with literature up

to date regularly (at least once per year or once every two years). It should be noted that some A and B part study course descriptions have compulsory literature dating from 2000.-2010. year period and they could be considered a bit outdated.

- 4 4 - The sample of the diploma to be issued for the acquisition of the study programme complies with the procedure according to which state recognised documents of higher education are issued.

Assessment of compliance: Fully compliant

The diploma issued complies with the state legislation and "Procedures by which documents certifying higher Education recognised by the State shall be issued" (Cabinet of Ministers No. 202). See annex: Standard sample of study agreement Annex No. 7.

5 - The academic staff of the academic study programme complies with the requirements set forth in Section 55, Paragraph one, Clause 3 of the Law on Higher Education Institutions.

- 5 5 - The academic staff of the academic study programme complies with the requirements set forth in Section 55, Paragraph one, Clause 3 of the Law on Higher Education Institutions.

Assessment of compliance: Fully compliant

There are at least 5 associated professors or professors involved in the study programme implementation together. See annex: Certification that academic staff of the academic master's study programme "Geology" complies with the requirements laid down in section 55 No.11.

- 6 6 - Academic study programmes provided for less than 250 full-time students may be implemented and less than five professors and associated professors of the higher education institution may be involved in the implementation of the mandatory and limited elective part of these study programmes provided that the relevant opinion of the Council for Higher Education has been received in accordance with Section 55, Paragraph two of the Law on Higher Education Institutions.

Assessment of compliance: Fully compliant

This criterion is met and AIP has approved the implementation of the study programme. See annex: Council of Higher education Opinion Brief No. 43.

- 7 7 - At least five teaching staff members with a doctoral degree are among the academic staff of an academic doctoral study programme, at least three of which are experts approved by the Latvian Science Council in the respective field of science. At least five teaching staff members with a doctoral degree are among the academic staff of a professional doctoral study programme in arts (if applicable).

Assessment of compliance: Not relevant

Not relevant

- 8 8 - The teaching staff members involved in the implementation of the study programme are proficient in the official language in accordance with the regulations on the level of the official language knowledge and the procedures for testing official language proficiency for performing professional duties and office duties.

Assessment of compliance: Fully compliant

The academic staff has sufficient Latvian language knowledge for implementing study courses, see annex : Basic information about the teaching staff involved in the implementation of the study field No.9.

- 9 9 - The teaching staff members to be involved in the implementation of the study programme have at least B2-level knowledge of a related foreign language, if the study programme or any part thereof is to be implemented in a foreign language (if applicable).

Assessment of compliance: Fully compliant

The academic staff has sufficient foreign language knowledge for implementing study courses, see annex : Basic information about the teaching staff involved in the implementation of the study field No.9.

- 10 10 - The sample of the study agreement complies with the mandatory provisions to be included in the study agreement.

Assessment of compliance: Fully compliant

Study agreements include all necessary parts set in legislation. See the annex: Standard sample of study agreement No.7.

It is advised to include information about guarantees of compensation losses (11. and 12. criteria) so that this information is easier for the students to acknowledge already from the beginning.

- 11 11 - The higher education institution / college has provided confirmation that students will be provided with opportunities to continue their education in another study programme or another higher education institution or college (agreement with another accredited higher education institution or college) if the implementation of the study programme is terminated.

Assessment of compliance: Fully compliant

University has a record order as confirmation that in case the implementation of this study programme is terminated students will be able to continue studies in UL academic master study programme "Geography". See annex: A copy of a document certifying that the higher education institution will provide students with opportunities to continue their education in another study programme No. 5.

- 12 12 - The higher education institution / college has provided confirmation that students are guaranteed compensation for losses if the study programme is not accredited or the study programme's license is revoked due to the actions (actions or omissions) of the higher education institution or college and the student does not wish to continue studies in another study programme.

Assessment of compliance: Fully compliant

University has a rector's order, that confirms it will compensate losses to students if the study programme is not accredited or loses its license and the student does not wish to continue studies in another study programme. See annex: A copy of a document certifying that the higher education institution guarantees compensation for losses to students No. 6. It is advised to include this information in the study agreement.

- 13 13 - The joint study programmes comply with the requirements prescribed in Section 55.(1), Paragraphs one, two, and seven of the Law on Higher Education Institutions (if applicable)

Assessment of compliance: Not relevant

Not relevant

- 14 14 - Compliance with the requirements specified in other regulatory enactments that apply to the study programme being assessed (if applicable)

Assessment of compliance: Not relevant

Not relevant

Assessment of the requirement [8]

- 1 R8 - Compliance of the study programme with the requirements set forth in the Law on Higher Education Institutions and other regulatory enactments.

Assessment of compliance: Fully compliant

The requirement has been met and fulfilled, and all requirements set in different regulatory enactments are satisfied

General conclusions about the study programme, indicating the most important strengths and weaknesses of the study programme

The goal of the study programme MSP Geology is in compliance with the study field. The aims and objectives of the study programme are in line with the goal of the study programme. The content of MSP Geology study courses is coordinated with each other and ensures the achievement of the results of the study program, as well as meets the needs of employers MSP Geology has good infrastructural prerequisites. The informative provision includes a library that is well-equipped and available to students and the teaching staff. Laboratories are well equipped. The material and technical provisions are renewed on a yearly base. The teaching staff works closely together both in scientific and teaching work.

Strengths:

The study programme is developed according to the needs of the labour market.

MSP Geology's content is current and in line with industry trends.

Good infrastructural prerequisites include well-equipped laboratories and a library.

The balanced structure of the teaching staff with a large number of young assistant professors.

Weaknesses:

The low number of students enrolled raises a question about the profitability of the study programme.

Evaluation of the study programme "Geology"

Evaluation of the study programme:

Excellent

2.6. Recommendations for the Study Programme "Geology"

Short-term recommendations

Encourage students to spend more time in the library by giving them specific tasks which would ensure that they have to spend some time there in search of the data.

Make the study programme more visible to the public and to the students.

Long-term recommendations

More clearly define the admission requirements for those entering the study program, in terms of special geological knowledge and competencies required.

Communicate with both students and employers the importance of finishing their studies.

Encourage teachers to participate in outgoing mobilities by rebalancing their workload at the Faculty, especially in teaching.

Ensure the procedure of regular study course literature updates, especially in study course descriptions.

III - Assessment of the Requirements for the Study Field and the Relevant Study Programmes

III - Assessment of the Requirements for the Study Field and the Relevant Study Programmes

Assessment of the Requirements for the Study Field

Requirements	Requirement Evaluation		Comment
R1 - Pursuant to Section 5, Paragraph 2.1 of the Law on Higher Education Institutions, the higher education institution/ college shall ensure continuous improvement, development, and efficient performance of the study field whilst implementing its internal quality assurance system:	Fully compliant		All the subcriteria are fully compliant
R2 - Compliance of scientific research and artistic creation with the level of development of scientific research and artistic creation (if applicable)	Fully compliant		There is a clear correlation between scientific interest and teaching and scientific research is an integral part of the study process. Faculty participate in large-scale projects only as partners and not as leading institutions. However, this does not affect the final grade and the fact that teachers are scientifically active and that their research complies with the level of development of scientific research.
R3 - The cooperation implemented within the study field with various Latvian and foreign organizations ensures the achievement of the aims of the study field.		Partially compliant	Only some progress in comparison with the previous assessment is made. The outgoing mobility is at a low level, while another kind of cooperation is good.

Requirements	Requirement Evaluation		Comment
R4 - Elimination of deficiencies and shortcomings identified in the previous assessment of the study field, if any, or implementation of the recommendations provided.		Partially compliant	Although the majority of recommendations from the previous reaccreditation were taken into account there is a still low number of incoming and outgoing teachers.

Assessment of the Requirements for the Relevant Study Programmes of the Study Field

No.	Study programme	R5	R6	R7	R8	Evaluation of the study programme (excellent, good, average, poor)
1	Geoinformatics (42442)	Not relevant	Fully compliant	Fully compliant	Fully compliant	Excellent
2	Geography (43442)	Not relevant	Fully compliant	Fully compliant	Fully compliant	Excellent
3	Geology (43442)	Not relevant	Fully compliant	Fully compliant	Fully compliant	Excellent
4	Geography (45442)	Fully compliant	Fully compliant	Fully compliant	Fully compliant	Excellent
5	Geology (45442)	Fully compliant	Fully compliant	Fully compliant	Fully compliant	Excellent

The Dissenting Opinions of the Experts

There were no different opinions.