Expert group joint opinion

Evaluation Procedure: Assessment of Study Field

Higher Education Institution: Rīga Stradiņš University

Study field: Wildlife Sciences

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

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The study field "Wildlife Sciences" of Rīga Stradiņš University (RSU) and the relevant study programs: academic master study program "Biomedicine" and Academic Master ‘’Biostatistics’’, conform with the main fields of the strategic development of RSU and meet the needs and development trends of the society.

The academic master study program "Biomedicine" develops a deep understanding and competencies in biomedicine's core aspects and topical issues to conduct scientific research using scientific achievements in solving medical matters. Biomedicine is a branch of science that studies the theoretical aspects of medicine and practically combines them with the concepts of other, mainly biological and other natural sciences. The academic Master's degree in biomedicine (Mg. Biomed.) is entirely consistent with the stated goal of the study program: to prepare specialists in the field of biomedicine who (1) can follow modern biomedical guidelines in research planning and analytical work in the lab, (2) can apply the knowledge of fundamental sciences in solving medical problems (3) knows how to apply modern scientific achievements in the planning of medical and biomedical research, as well as can practically conduct and manage research in one of the selected branches of the biomedical discipline. At the end of the study course, "Biomedicine" students are awarded the following Degree and Qualification: The Master's Degree of Natural Sciences in Biomedicine.

Biostatistics is the branch of statistics that studies living organisms and the data obtained during biological and medical research. The study program allows students to acquire in-depth knowledge of methods for processing statistical data. The program "Biostatistics" enhances their understanding of the causes and development of the most common diseases and epidemiological and clinical research. At the end of the study course, "Biostatistics," students are awarded the following Degree and Qualification: Master's Degree in Natural Sciences in Biology.

The academic master study program "Biomedicine" and the Master's study program "Biostatistics" are accredited until the 31st of December 2023.

In RSU, clear administration procedures are executed. Policies for academic integrity and ethics are established and work smoothly. RSU has implemented protection tools to prevent unethical behaviour. Guidelines for students' admission and evaluation of achievements are legally recognized and implemented. Overall, RSU has a thorough and easy-to-understand quality assurance system that everyone in the RSU follows. The UL staff is aware of the quality assurance system and follows it willingly and without problems. However, some aspects can be improved, such as the feedback on evaluating the courses in the academic master study program "Biomedicine". It can be considered positive that the information about study programs on the RSU home page is available in Latvian and English. The study and research resources of the Faculty of Medicine of RSU can be rated as excellent. It is important that financial planning, execution, and monitoring of results are based on developed methodologies that ensure the success and the role of the Faculty of Medicine and its study programs. The Library of RSU and its digital resources and databases allow students to access all the necessary up-to-date information and classical textbooks, which makes the learning process smooth and modern. The quality and resources of the Library provide ample education possibilities for academic staff to renew, improve, and support their qualification and research opportunities. The support system for students and academic staff of RSU is among Latvia's best, with numerous staff members involved.

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The research areas of staff members and students of the academic master study program "Biomedicine" and "Biostatistics" are well defined, fit the institutional goals, and are appropriately connected with teaching activities. Diverse strategies and proper attention to permanent training of the teaching staff have been developed and implemented. Internationalisation is identified as a priority and can be rated among the best in the country. The research outcomes, such as the number of scientific articles published by international publishers in indexed journals, constantly rise and can be considered satisfactory. However, the participation of the teaching staff in international research projects should be enhanced. Cooperation with other institutions in Latvia is well-established and closely linked to the study programs. Collaboration in research takes place mainly through research projects, of which some have been international. New international cooperation projects in research are needed to enhance the academic level of the study field in the future, especially to attract international students to the academic master study program "Biomedicine". Student and teaching staff mobility is modest, although the number of guest lecturers has increased recently, especially in the study program "Biostatistics."

There are noticeable improvements made within the study programs based on the recommendations from the previous accreditation. The majority of the recommendations have been fully implemented. However, several suggestions are implemented partly and should receive more attention in the future.

Changes in the academic master study program "Biomedicine" were approved at a meeting of the Study Quality Commission (SQC) of the Quality Agency for Higher Education (QAHE; AIKA in Latvian) on September 4, 2019, and the program code was changed from 45420 to 45421, and the degree to be obtained was changed from "Master of natural sciences in biology" to "Master of natural sciences in biomedicine." However, this change has not been approved yet by the Cabinet of Ministers of the Republic of Latvia. Although the draft amendment is in the process of being agreed upon by the Cabinet of Ministers of the Republic of Latvia, the titles of degrees and their codes are currently regulated by "Amendments to the Regulations of the Cabinet of Ministers of May 13, 2014 No. 240 - Rules on the Standard of State Academic Education." Despite these inconsistencies between the current approach used by the academic master study program "Biomedicine" of RSU and the state's regulations, this initiative of RSU is to be supported as this university has always tended to introduce international standards in higher education and research in Latvia.

I - Assessment of the Study Field

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1.1 Management of the Study Field

Analysis

1.1.1. The study field "Wildlife Sciences" (study field) and the study programs within it comply with the main directions of the strategic vision of Rīga Stradiņš University (RSU) and meet society's needs and the developing trends on the local/regional level. The development of each study field is

planned following the 6–year development strategy of RSU: "Developmental Strategies of Rīga Stradiņš University 2022-2027" (www.rsu.lv/sites/default/files/docs/rsu_strategija_2027_kopsavilkums.pdf). The mission of RSU is to ensure the creation, accumulation, and transfer of knowledge valued in the international scientific community, to offer excellent, inclusive, and sustainable educational opportunities, and to contribute to the development of society in the fields of health, life, and social sciences, realising the potential of every student and employee throughout life. The main development goals of RSU until 2027 are as follows: (1) production of locally and internationally significant scientific results; (2) implementation of education in line with societal and individual needs for building the overall human capital capacity. Since the aim of the study field is to implement research-based, high-quality and exportable higher education in Europe and worldwide, providing a solid foundation for academic and professional education, as well as research work in the fields of biomedicine and biostatistics (SAR, p. 16), the aims of the study field are clearly and logically indicated as part of the RSU developmental strategy. The experts found that the aims of the study field are precisely defined considering realistic conditions of changing political, economic, and technological requirements. It has also been found that the interconnection of the study programs included in the study field is clear and logical. Overall, the quality of teaching and scientific research at the RSU can be rated as effective and adequate.

1.1.2. The aim of the study field is to implement research-based, high-quality and exportable higher education in Europe and worldwide, providing a solid foundation for academic and professional education, as well as research work in the fields of biomedicine and biostatistics (SAR, p. 16). The SWOT analysis of the study field has been reflected in the Self-evaluation report Study field published by RSU in 2023. It focuses on the strengths, weaknesses, opportunities, and threats; these evaluation categories are correctly explained in the Self-evaluation Report (SAR, pp. 17-20). The following threats have been mentioned: (1) The further activities of graduates of "Biomedicine" in scientific research are limited because Latvia has a relatively small number of scientific groups, institutes, and scientific projects in biomedicine, affecting job opportunities for the graduates. (2) The further professional activity of graduates of the study program "Biomedicine" is limited, as it depends mainly on the size of the biomedical industry. This might be a limiting factor not only to the number of jobs but also to the amount of salaries. (3) High costs of the study program "Biomedicine" affect the number of available students. (4) Low motivation of potential students of both Biomedicine and "Biostatistics" as both program belong to the exact sciences. The SWOT analysis shows that most of strengths and weaknesses are internal, while most of threats are external. Importantly, the strengths are continually maintained by the leaders of the study field and the study program. For example, the quality of the teaching staff is exceptionally high, which ensures the quality of studies and the expertise of the students involved. Notably, RSU is considered one of three research universities in Latvia. It suggests excellent opportunities to grow student numbers, improve scientific research and reputation, and enhance the quality of all study fields and programs. Serious threats, elements in the environment, that could cause trouble for the study field development have not been identified. However, the SWOT analysis should be performed constantly to monitor internal and, especially, external factors that may change unexpectedly.

1.1.3. Several structural units of RSU, including the Study Quality Council, Faculty Council, Dean’s Council, Rectorate, and the Senate, are collegially responsible for administering the study field and Study Programs (SAR, pp. 4-11). The requirements for the quality control and inspections of the study fields and their study programs are determined in the Regulations for Development and Approval of New Study Programs at RSU (Description No. 34 of “Updating and Development of Study

Courses, Study Program, Study Directions," by the requirements of external laws and regulations. Responsibility for the quality of the study field and the study programs implemented lies on the head of the study field, the Dean of the Faculty of Medicine and the Heads of the study programs. The management structure of the study field facilitates the development of the Wildlife Sciences field and the corresponding programs as required by a new status of a research university.

1.1.4. Admission to RSU takes place based on admission requirements of the respective study level approved by the RSU Senate as defined for the particular academic year by the condition of the Law on Higher Education Institutions. RSU has admission regulations for each level of study; these are available on the RSU website in Latvian and English (Annex No.1, Annex 23, Paragraph 1.4: in "Student matriculation, progress of studies, recognition and certification of qualifications"). Since the academic master study program "Biomedicine" belongs to a complex field of biology, medicine, chemistry, and lab science, and students from different backgrounds can apply, the idea of the preparatory courses is of high value. The purpose of the introductory courses is to help with the knowledge test provided to fit the admission requirements of the study program "Biomedicine," consisting of 30 biology-related and 25-related topics and questions. In assessment visit experts had an opportunity to meet stakeholders and hear their positive opinions about the current state and the future of the study field and "Biomedicine" and "Biostatistics" programs. It was evident to the experts that stakeholders have regular chances to meet the Heads of the study programs to discuss matters related to student admission and the study quality.

1.1.5. Students' study and research achievements are assessed following the aims of each study course and the evaluation criteria of the study program. The lecturers introduce students to those requirements at the beginning of each study program/course. Standards for research articles are easily available in the methodological guidelines for students of Master's study programs (in Latvian and English). Overall, methods, principles, and procedures for assessing students' achievements have been clearly defined (SAR, pp. 22-23). This is achieved by regularly monitoring the quality of study programs, involving the teaching staff, the Heads of study programs, and other structural units of RSU. During the experts' assessment visit, it was found that the exchange of information about the quality of studies also occurs at the level of lecturers and students. Although this collaborative information exchange ensures the teaching quality in the lecturer-student dyad, the experts felt that lecturers rarely exchange information about each student's progress.

1.1.6. RSU respects the principles of fair and responsible conduct as stipulated in the RSU Code of Ethics, which is available to students of research and teaching staff (SAR, pp.23-25). RSU has established the Ethics Committee that considers violations and cases of disputes. The RSU has also developed and approved the document "Methodological Guidelines for Citing References and Compiling Bibliography," which explains the principles of fair research and study work to students. To facilitate compliance with academic integrity, RSU has implemented and uses the Unified Computerised Plagiarism Control System of Latvian higher education institutions to check the originality of the content of final theses. RSU owns a licence for the plagiarism-checking tool "Turnitin" for broader use, which is integrated into the RSU e-learning website.
There are some additional specificities of implementation of academic integrity in the programs of the study field "Wildlife Sciences": (1) students are taught basic principles of academic integrity already during their first lectures; (2) it is the responsibility of the Heads of the study programs to inform about the principles of academic integrity and the prevention procedures, such as consideration of plagiarism cases in department meetings, maintenance of a plagiarism register,

recording each plagiarism case; (3) all Master's theses are uploaded to the e-studies system and checked with the help of the Turnitin tool; (4) most of other study works are checked using Turnitin.

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

Conclusions:
Considering all the above mentioned, the study field and the relevant study programs generally conform with the main areas of the RSU's strategic development and meet society's needs and development trends. RSU has outlined and executed clear administration procedures. Policies for academic integrity and ethics are established and work efficiently.
The management and governance of RSU are flexible and support study field and study program development. Administrative support for the programs is well organised. Procedures for students' admission and evaluation of achievements are legally recognized, successfully implemented, easy to comprehend, and not formalised too much.
RSU has implemented protection tools to prevent unethical behaviour, using efficient approaches, such as an anti-plagiarism system. Essential study field and program information is published and easily accessible on the RSU website in Latvian and English.

Strengths:
1) The study field and the envisaged results of its study programs meet the needs of society and correspond to the strategic vision of RSU.
2) The management system of the study field and programs is well-organised and outlines comprehensible responsibilities and distinctions of tasks.

Weaknesses:
1) Regular exchange of information on each student's progress among the teaching staff members is largely missing and has not been established as an everyday tool to uncover student problems and enhance the success of the study process.
2) The SWOT analysis could be used regularly because internal and external factors may change unexpectedly. This will help define the study field's development strategy better and improve teaching quality.

1.2. Efficiency of the Internal Quality Assurance System

Analysis

1.2.1. RSU has established a quality assurance system consisting of several elements that comply with the Standard and Guidelines for Quality Assurance in the European Higher Education Area (ESG), and also recognizes the ENQA (European Quality Association) standards for ensuring higher quality education. Annex 23 describes the Quality standard implementation in RSU. The quality policy of the RSU is publicly available (https://www.rsu.lv/par-rsu/strategija-dokumenti) in both Latvian and English. As stated in the quality policy, it is implemented by all RSU units and employees, through the implementation of strategic objectives at both departmental and individual level. The RSU quality management system is implemented and maintained in accordance with the ISO 9001 standard. This is showcased though the Self evaluation report and Annex 23, that details how the study programs are compliant with Standarts and Guidelines for quality assurance in the European higher education area.
RSU in the self evaluation report (2.2.) states that the main principles for quality assurance are: student-centered approach; partnership; quality. RSU has established a Quality Assurance Council, which develops and amends the quality policy of the Consortium. Study Quality Council is composed of both the management of the StD/StP, lecturers and student representatives, as well as

representatives of employers. Moreover (Annex 23), necessity, usefulness, profitability, compliance of a new study programme with the set aims and expected learning outcomes, as well as the content of the programme are evaluated by the Study Quality Council, Faculty Council, Dean's Council, Rectorate and Senate.The study quality Council involves representatives of employers and industry, who as experts advise in the process of drawing up the study programme. Annual review process of study programmes and study directions is regulated by the Rector's decree or the instructions of the Board of Studie. Quality Assurance and Internal Audit Department is responsible for Maintenance and upgrading of management system, risk management, internal system and quality audits. The composition of the council is based on the basic principles of good practice, involving both students and other members. RSU quality monitoring is carried out both by internal system and quality auditors and by independent external experts. The Quality Assurance Board consists of permanent members appointed by the Board and invited ad hoc members. The independent members of the Council include the Chairman of the Quality Assurance Council (an external independent expert who is not affiliated with any of the Partners), four Vice-Chairmen of the Quality Assurance Council (local academic coordinators) and one student representative elected by their peers.
The public's attitude and opinion, as well as RSU's popularity, are regularly determined by participating in reputation surveys and brand evaluations, as stated in the self evaluation report (1.3.). A detailed description of the quality assurance system is included in the Standards and Guidelines for Quality Assurance in the European Higher Education Area. The quality policy is the cornerstone for ensuring an inclusive environment, student-centered approach, program development and testing, which includes its implementation in all units of the RSU.
The contribution to achievements of the study field logically fits into the system developed by RSU and is subject to equivalent quality assurance and monitoring, but it is not specifically stated how the specific aspects of the study programs are ensured for quality surveys and student representatives, which indicates student-centered monitoring and assurance of learning, in connection with the material and technical base and other materials use, as well as the planned new study courses, so that they are included in the system. Overall the quality policy contributes to the achievement of the aims and learning outcomes of the study field and the relevant study programs with continuous collection of data, having student surveys on how to develop the programs and study field, (explained in p.12 in the self assessment) having the well-made system of quality assurance work also in this specific study field, as it is no exception.. The system ensures continuous improvement, development, and efficient performance of the study field by promoting the set values on the study field and programs as mentioned in the Annex 23, 4.2 and annex 11, as p.26. States the quality policy energy management policy and the implementation and application of the system to the study field.

1.2.2. As stated in the self evaluation report, the procedures for development and review for study programs and feedback mechanisms entail External partners participating in the meetings of RSU Convent of Councillors, Alumni Association, Study Quality Councils and the meetings of faculties and departments. Employers are involved in Faculty Councils. The composition of the Faculty Council is approved by the Senate on the basis of the proposal from the Dean of the Faculty. The Student Union cooperates with the International Students’ Association, ensuring that interests of both the Latvian and international students are represented in the management process. Annual revision process of study programs and study field is regulated by the Rector’s decree or the instructions by the Board of Studies, and its goal is to prepare a summary of the annual study process quality monitoring.
Regarding graduates, not a lot of detail is showcased though the SAR. Students complete an anonymous electronic questionnaire for each study course mastered during the semester and a final

questionnaire once graduating the study program.
During the assessment visit, the RSU management stated that the quality assurance and feedback surveys for students is now mandatory in order to get more information on study courses and programs, especially for smaller programs such as the Biomedicine and Biostatistics. The system has a clear division of responsibilities for data analysis at various levels (RSU institutional level, study direction and program levels, faculty and academic structural unit levels and study course level). However, the RSU states that “the director of the study program communicates with the main employers directly (by telephone, by email, in various meetings), as experience has shown that such communication is more effective both in providing information about the study program and in order to identify employers' views and their wishes” (SAR Paragraph 2.2.4.). This on the one hand is a factor of risk as there is no centralized approach to conducting the recommendations, having them officially submitted. During the assessment visit, not all of the independent employers recall making specific recommendations for the study program, because no centralized survey has been put in place. On the other hand, the small number of students makes it easier to communicate in less formal ways, though, then the communication and implementation of the recommendations is a responsibility of the director of the study program.

1.2.3. Description No. 31 “Management of Complaints, Appeals, Non-Conformities and Proposals” states that students may submit complaints to the Student Services, Student Union and Quality Assurance and Internal Audit Department. The mechanism for complaints and suggestions is effective and promotes improvements as the results are included in the document "Report on the Quality Management System".
The students seem to be informed on how they can suggest improvements or submit complaints as found in the assessment visit. Additionally, as mentioned previously, the program, course surveys are made mandatory and that is an additional way of students giving feedback and complaints. The students are informed about the complaints system at the beginning of each study course of the study program. During the first practical class, the teaching staff shall explain to students the procedure for the implementation of the course. The statistical data shows that the number of appeals, complaints and proposals has steadily declined. The RSU has identified the main reasons for such complaints. Additionally, the information about recommendations and complaints is available in both English and Latvian at the RSU website.

1.2.4. A system for centralized collection and analysis of data is established by the HEI. As stated (SAR 2.2.4.), the system is implemented in levels of RSU institutional level, study field and program levels, faculty and academic structural unit levels and study course level. Every month, RSU collects the most up-to-date data on the number of students, including student status. All of the data is stored in a physical data server and backed up regularly. The information collection mechanism is effective as it obtains information regularly and provides feedback for involved parties. The RSU states 13 different ways on how the information collected effectively improves not only the study field, but also the work of employers etc. Some examples of mechanism of obtaining and providing feedback in work with students and graduates include regular anonymous surveys, evaluation questionnaires, from where the data then on is collected and published on the RSU Academic Portal, where they are available to study program directors, heads of study directions and faculty deans for further improvement of the study field. As mentioned previously, the feedback and data collection from employers for the specific study field (for smaller programs) would need a more centralized approach that would obtain statistical information, as the approach now is more based in the study directors personal contact with the employers. The aforementioned communication with employers takes place every two years, but cooperation with employers, who are involved in the Study Program Quality Council, is ongoing throughout every academic year, though it is not made very

specific on what criteria are the employers selected. Data on the use of the e-studies environment are collected on a regular basis as stated by the RSU, although specific statistical data and examples of how the information of the e-studies system is used practically could be added in more detail.

1.2.5. The information made public by the RSU corresponds to official registers and is published in both Latvian and English. SAR 2.5.5. Paragraph clearly provides all of the necessary websites on which the information on the study field and the relevant study programs are published. For both of the programs, information is publicly available in Latvian language, though it does not entail the study course in detail nor in English's or Latvian. The information in English's for biomedicine study program entails a short “fact file” and head of program as well as the teaching staff. For the Biostatistics program, the information is equal in both English and Latvian, consisting of both the fact file, study environment, contents and methods etc. Therefore, one of the websites does not represent important information in English's (https://www.rsu.lv/en/study-programme/biomedicine).

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

Conclusions:
Overall, RSU has shown to prioritise the quality of studies as well as procedures related to the efficiency of HEI's functions. The quality assurance policy has been updated as of 2023 and its mechanisms are effective. The statistical data is used at its best capacity and provides a meaningful insight for the further development. The RSU website for the study field and programmes does not involve a in-depth study course descriptions and for the academic master study program "Biomedicine", the information in latvian and english is not the same. A more centralised approach to conducting feedback from employers and graduates would be insightful but the quality assurance system makes an impression of continuous development and seems to be functioning properly.

Strengths:
1) The internal quality assurance system is holistic and involves main involved stakeholders.
2) The statistical data is collected and used effectively, the student surveys have been made mandatory and broader feedback of all the study programmes can be effectively used to improve the study quality.

Weaknesses:
1) There is a lack of a centralised approach to conducting the recommendations from the employers regularly as it is mainly done by the director of the study field, and information on how specifically graduates are questioned is not clear.
2) Information about the study programmes and study field is publicly available in latvian language, though it does not entail the study course in detail nor in english or latvian.
3) The information in English for the academic master study program "Biomedicine" does not contain the full information opposite to the website in latvian.
4) No specific statistical data and examples of how the information of the e-studies system is used in order to improve the study field.
5) No specific example on how the specific aspects of the study programmes are ensured for quality surveys and student representatives, in connection with the material and technical base and other materials use, as well as the planned new study courses, so that they are included in the system.

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

The weaknesses indicated in chapter 1.2. Reflect evaluation criteria and are easily changeable, overall, the system of quality is well-made and ensures continuous development.

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

SAR Paragraph 2.2., analysis of the point makes it clear that The higher education institution/ college has established a policy and procedures for assuring the quality of higher education and it fulfils its purpose. Though the only mechanical weakness regarding this study field is regarding centralised approach from receiving employers feedback and more specific information on the feedback from the graduates. Experts want to draw attention to this, but it is only for improvement and doesn't affect evaluation .

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

SAR 2.2.2. And Description No. 34 “Updating and Development of Study Courses, Study Programmes, Study Directions” entails that a mechanism is developed.

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: Fully compliant

Paragraph 2.1.5 and Annex 17.1 (Study programme compliance with the national education standard (for each study programme) and Annex 23 state that a procedure is put in place, has been developed and made public.

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

In Paragraphs 2.3.5, 2.3.6, 2.3.7 and Paragraph 1.5 of Annex 23, Each year compliance assessment is conducted, and the mechanisms are reviewed.

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

SAR p.15. Largely consist of annexes of the following: 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, key performance indicators. The annexes are relevant and as found, such data (as explained in the 2.2.4. SAR), the centralised approach for collection of data is efficient and is constantly developing.

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

Annex 23, Annex 4.1.; 4.2. And 11 consist of information how improvement, development and performance is taken into account whilst implementing their quality assurance systems.

1.3. Resources and Provision of the Study Field

Analysis

1.3.1. According to the SAR (point 2.3.1. p.36.), funding for the implementation of the study field is provided from state budget grants for studies and social payments; revenues from tuition fees and fee-based courses; funding for science (state budget and EU structural funds, international project funding, revenues from contract work) and revenues from other services, for example, student halls, rental of premises and equipment.
According to the SAR (point 2.3.1. p.36.), the expenses related to the remuneration of the academic staff constitute the highest costs for the implementation of the study programs. The remuneration rates for the academic staff is determined in accordance with the regulations on types and record keeping of work done by the academic staff developed by RSU. The amount of remuneration for the academic staff is determined by taking into account the academic position of the staff, the department and the amount of pedagogical work carried out during the academic year. The amount of pedagogical work is determined on the basis of the planned number of pedagogical work units in the study courses implemented by the department in the relevant academic year. Pedagogical work units according to the types of pedagogical work are planned, calculated and listed in accordance with the regulations developed by RSU.
According to the SAR (point 2.3.1. p.36.), during the annual RSU budget planning process, each department plans its own department budget, which is necessary for the implementation of study programs, research and provision of infrastructure expenditure. When planning the budget, the director of each study program discusses the provision necessary for the study program with the head of the department, whereas the departments submit budget applications, which are further evaluated by deans, persons responsible for the procurement, vice-rectors and the Rectorate. The budget submitted shall be agreed by the Senate and approved by the Council. The budget allocated to the department depends on a number of factors, such as the planned number of students, the planned amount of pedagogical work, the necessary infrastructure investments, the necessary investment in the development of study programs, maintenance costs of the departments, revenue trends in the particular faculty, scientific activities, etc. Financial results of the particular academic year of each study program are also taken into account in the planning of the budget. A detailed budget is approved for each structural unit, i.e. specific costs for a specific purpose are approved. Within the budget year, it is possible for departments to request additional funding, if there have been changes in a factor, for example, a larger number of students applies for a specific programme, as planned in the preparation of the budget application (revenues have also increased accordingly).
According to the SAR (point 2.3.1. p.37.) External financing is provided by participation in various EU

and national programs and initiatives – the biggest EU research and innovation programs Horizon 2020 and Horizon Europe – and funding opportunities such as Joint programming initiatives, International Cooperation programs, EU Structural Funds and other programs are also used. From local funding initiatives: National Research Program and Fundamental and Applied Research Program. External financing also consists of revenues from cooperation with the private sector (contract research, commercialization projects). The assets are used in RSU internal programs, which are funded from RSU resources. The funding for internal research projects is allocated during the planning of RSU annual budget. Several internal funding programs exist: grants for doctoral students, RSU internal grants, interuniversity cooperation grants, aid to certain projects from RSU Alumni Association, cooperation with the Boris and Inara Teterev Foundation. Artistic creative activities (dance group and choir) are funded from RSU own funds with Riga City Council co-financing. In order to promote research and help researchers at the initial stage of their careers, RSU has established multiple incentive schemes and practices (Listed in SAR under point 2.3.1. p.37.)
It is noted that academic master study program "Biomedicine" is intended solely for academic activity and funding for scientific research is used only during their master's theses development at RSU research institutes (point 2.3.1. p.37.). During the assessment visit interviews the representatives of RSU institutes highlighted that it is challenging to attract sufficient external funding to fully use the capabilities of their premises and equipment, making salaries unstable which additionally makes it difficult to retain the researchers long-term. This issue is not unique to RSU and while it does not necessarily impair the study programs in experts scope, it could become an issue if the number of students increases.

1.3.2. According to SAR (point 2.3.2. p.37.), in order to ensure continuous availability of IT resources for the study process, an IT Service Centre was established: IT support for students, administrative staff and teaching staff providing answers to questions related to RSU IT systems. The applicant may ask questions using the IT User support system - for help.rsu.lv, by e-mail: it@rsu.lv or call phone number 67061515.
According to SAR (point 2.3.2. p.38.) RSU staff and students have the possibility to use the Eduroam WiFi network free of charge. Eduroam has a free service that allows you to connect to the WiFi network in more than 6,000 locations in over 100 countries around the world. RSU students may also use open access computers with provided access to student IT systems and Internet resources.
Multimedia projectors, most of which are high-resolution interactive projectors connected to a sound system, are available in 193 lecture rooms for the use of audiovisual materials for studies. A centralized management system of the multimedia equipment in lecture rooms has also been set up. Ten computer rooms with more than 200 workstations are also available for the study process, both for specific courses and for electronic examinations and other types of knowledge tests:
1. 28 hybrid lecture rooms with automatic following the conducting of hybrid lectures and classes.
2. 8 lecture rooms for more than 100 students, equipped with the possibility of conducting online lectures and classes.
3. Other auditoriums are equipped with standardized equipment, which includes interactive projectors or interactive TV screens and centralized management of multimedia equipment.
4. Recording room for recording high-quality audio and video content for lectures and online events, as well as for recording podcasts or audio soundtracks.
5. There is a specially equipped studio for creating interactive content. Various technological solutions are available in the studio: Green screen, Interactive display and the first transparent whiteboard (learning glass) in the Baltics, which can be used to prepare more engaging and enjoyable video lectures and classes.
The physical IT infrastructure of RSU is described in detail in SAR under point 2.3.2. p.38.
According to SAR (point 2.3.2. p.39.) RSU lecturers and employees have the opportunity to use the

room booking system Booker, which is linked to the lecture and lesson planning system Timetable. The room booking system Booker allows you to find all the rooms RSU offers for the study process, view the room occupancy, including lectures and classes, as well as make room and table bookings. The lecture and lesson planning system “Timetabler'' is a cloud-based service that provides an opportunity to schedule academic events for students and lecturers in a fast and efficient way. System functionalities are listed in SAR under point 2.3.2. p.39. The infrastructure and technical facilities established by RSU are equally available for all RSU study programs. Detailed information on infrastructure and material and technical provision is available in the Annex 23.2 “Assessment of the information and methodological base for IT infrastructure and available resources”.
During the assessment visit experts were informed that Department of Pharmacology is being moved to their new premises (Konsula street 21) resulting in more space being available for Wildlife Sciences students. While mentioned multiple times during the assessment visit, Artificial intelligence is not explicitly addressed in the SAR, but the Academic personnel are well aware of the opportunities and challenges that it will bring. The experts agree that the infrastructure resources and material and technical support necessary for the implementation of the study field is excellent and has been greatly improved in the last few years.

1.3.3. According to the SAR (point 2.3.3. p.40.) each year, the Library environment is gradually improved and upgraded; new technologies and services are introduced (self-service facilities with possibilities for users to issue the books to themselves, return the books, extend the period of use, view their user account, as well as print, copy and scan by using multifunctional equipment). Self-return facilities allowing to return the library books also outside the Library opening hours are located at the entrance of RSU building at Dzirciema iela 16, and J.Asara iela 5. Information resources that are not available in RSU Library collection can be ordered from other libraries using the Interlibrary Loan (ILL) or the International Interlibrary Loan (IILL).
Funding for purchasing resources is increasing. Funding per one user of the library was 31 EUR in 2021. Approximately 89 % of the budget intended for acquisitions of the collection is spent on subscription and purchase of electronic resources. Access to 27 online e-resources is provided. Students and lecturers can access the subscribed databases remotely using the username and password assigned by RSU. Statistics on the use of databases is high. It is evaluated once half a year. Statistic indicators on the use remain high and tend to increase.
RSU has introduced and the Library has implemented the support process, which defines how to provide RSU study programs and research activities with the necessary information sources and services in the Library. The Process Description defines the following: 1) planning, evaluating and replenishing the acquisition of information sources and 2) determining the level of user satisfaction.
According to the SAR (point 2.3.3. p.40.) subscription to the databases takes place after trial periods and analysis of the statistics on the use, the user feedback, and costs. In order to improve the relevance of the Library collection to the needs of students, work is carried out on the bibliography of study courses, cooperation with the teaching staff to inform them about the provision of literature for study courses. Lecturers and students can also send their orders/suggestions for additions to the collection electronically to help.rsu.lv.
Availability of the Library data in the digital environment of the University The Primo unified search engine is used to manage e-resources, providing fast and streamlined search for e-resources. Information on databases is available also from RSU Student Portal MyRSU. RSU students have the opportunity to access students' final papers and other RSU publications in the Institutional Repository on the dSpace platform. Since 2020, publications of RSU academic and research staff are entered into the new Scientific activity information system (ZDIS) Pure (a unique tool in which it is possible to search for research in the fields of RSU research). Current events of the Library can be tracked on the Facebook profile “Rīga Stradiņs University Library”. RSU Library - an accredited

library of national importance. Re-accreditation was granted in November 2021. The library resources and services are assessed as very good, meeting the demand of students and teaching staff to ensure successful completion of the relevant study course. Simple procedures have been introduced to suggest additions to the collection or to contact the Library about services. Both student and teaching staff surveys confirm good and very good assessment of the Library. In recent years, the Library has received both the Annual Award of the Student Union (as a testimony to students' satisfaction with the quality of resources and services) and the Annual Award of RSU Administration as the best department of RSU. Like other universities in the world today, e-resources are a priority for RSU Library. Detailed information on infrastructure and material and technical provision is available in the Annex No. 23.1 "Assessment of the information and methodological base of the Library resources for the implementation of the study direction "Wildlife Sciences" in accordance with the requirements of the guidelines".

1.3.4. According to the SAR (point 2.3.4. p.41.) students and employees of Rīga Stradiņš University are provided with a developed IT infrastructure and IT services that are constantly developing taking into account the growing demands on IT from students and employees. One of the main sites used by RSU students is the e-learning environment. The e-learning environment provides access to all study courses implemented in all study plans, so e-studies can be used by any RSU lecturer, and students have access to e-study courses.
According to the SAR (point 2.3.4. p.42.) the e-learning environment is used as a tool for organizing the study process in each study course - for uploading various materials, completing tests and homework, checking plagiarism and posting assessment. In addition, the e-learning environment provides a calendar of upcoming events, the latest RSU news and discussion forums, study materials and all the latest information on what the course lecturer wants to share with students - various assignments, sample test papers, useful supplementary materials, etc. In the e-learning environment, students can access not only the courses of the current semester, but also the courses learned in previous semesters and the content of the previously completed courses, as they are for students in the current semester. RSU e-studies are available 24 hours a day, 7 days a week from any location with Internet access, including mobile devices. Student portal MyRSU is linked to the e-learning environment.
According to the SAR (point 2.3.4. p.42.) RSU students have access to the student portal MyRSU, which combines the opportunity to view the necessary information about studies and use e-services necessary for the study process in one place. MyRSU is available both as a browser and as a mobile app, which enables faster and more convenient access to all the necessary university information, such as e-studies and final grades in study courses, lecture and class schedule, invoices, application for Part B courses, acquired skills, study course and study program evaluation questionnaires and feedback, key contacts, access to Office 365 applications, self-service print management (printing, scanning, copying). Using MyRSU, students can extend the loan periods for books and access RSU subscribed databases. In the statements and submissions section, the student may request various statements, which will be signed with a secure electronic signature and sent to the student's e-mail address.
According to the SAR (point 2.3.4. p.42.) e-learning environment offers the possibility to host online conferences where the lecturer and students can meet virtually. These online virtual classroom meetings can also be watched later as a recording in the e-learning course. In some courses in the e-learning environment, students also have access to electronic tests for successful completion of the study course, which not only allow a quick and qualitative assessment of the students' knowledge, but can also be used as a tool that allows the student to master the course material with the help of the self-testing method. In each e-learning course, the lecturer can electronically record student attendance at lectures and classes, and the attendance data is automatically displayed in

the e-grades section, thus providing a more convenient overview of the student's performance in the course. The e-learning environment is also used as a tool to register remotely for placements, tutorials, examination dates and times and other events. Remote lectures and classes are mostly delivered via Zoom; video recordings are available using the Panopto service (RSU lecturers were provided with appropriate licences). Under these conditions, RSU lecturers demonstrate great IT skills. Not only the study courses, but also the process of developing, pre-defence and defence of the Master's theses takes place entirely online. This experience leaves no room for doubt about the possibilities of implementing the new study programs in the form of distance learning. The e-learning environment is already being used as a tool to organise the study process in each study course and provides appropriate opportunities for the implementation of study programs in the form of distance learning. In order to enhance the export capacity of the study program, it is planned to implement the study programmes also by distance learning (currently the Bachelor's study program "Law" is already being implemented by distance learning). RSU has provided an opportunity for students to submit their final theses in video format using the Panopto service.

According to the SAR (point 2.3.4. p.43.), the online examination service is provided in a secure environment using the LockDown Browser. The LockDown Browser is integrated into e-learning (Moodle) and designed to increase security during online examinations. When students use the LockDown Browser, it is not possible to perform actions such as copying, visiting other Internet links or apps, closing the test before it is submitted for assessment; the test cannot be minimized or the test window resized; key combinations and the right-click menu of the mouse are disabled, operating system menu bars are disabled, and messaging and screen-sharing links are disabled. RSU academic staff can make video recordings of lectures and presentations. Links to ready-made video recordings can be posted in the RSU e-learning environment as well as on other sites. The service is provided by the Panopto service. RSU academic staff can make live broadcasts of lectures and presentations. The service includes the possibility to create a link to the specific live broadcast in advance, which may be placed in the RSU e-learning environment as well as on other sites. Panopto enables parallel recording of multiple cameras and screens. The possibility to search for phrases in slides, the possibility to add subtitles or tests, as well as user view reports.

RSU academic staff and students have the possibility to use the Turnitin tool. Turnitin is the world's leading editing and anti-plagiarism tool. Turnitin is fully integrated into the RSU e-learning environment and provides a complete service for submission, correction, plagiarism detection and return of submitted work. All student papers are submitted to the lecturer-created Turnitin task, which not only facilitates the collection of papers, but the system automatically checks the originality of the paper, providing a full report on plagiarism in the content. The tool has the option of creating rubrics and comment templates, as well as for students to submit and evaluate each other. Checking for plagiarism is possible by comparing the paper with the work of other students (both at RSU and other higher education institutions in Latvia and in the world that use Turnitin), with the Internet resources that are freely available to everyone, and with journals, other publications, and resources included in the Turnitin database.

A Skills Monitoring System consisting of several components has been set up for the improvement of students' skills and for the maintenance of the acquired skills portfolio (listed in SAR under point 2.3.4. p.43.)

According to the SAR (point 2.3.4. p.44.), the e-resource repository DSpace.rsu.lv stores digital research. This site contains articles, papers, conference proceedings and other documents in a variety of digital formats. The defended Bachelor's, Master's and other final theses of RSU students have been accessible on the e-resource repository (DSpace) since 2020. Various RSU publications in Open Access are also published in the repository on a regular basis.

RSU has introduced a repository for study materials, which is a well-structured storage base for digital learning materials, where study materials for teaching purposes developed at RSU or obtained as a result of cooperation are placed. These include presentations, video lectures, training

videos, infographics, digital interactive scenarios, digital books and other types of information. Materials in the repository are structured by subject and collection, so that the necessary information can be found easily and quickly. Filters will allow you to search by author, year of creation, keywords or the format of the material, such as video, book, or presentation. Searching with the help of filters will provide an opportunity to narrow down the amount of information and quickly find the study material you need. The repository will give lecturers the opportunity to share materials, saving resources, as well as to familiarise themselves with examples of good practice of their colleagues.

Upon starting studies at RSU, each student is assigned a username and, using the self-service facility available to RSU students, students obtain a password that can be used in RSU IT systems for students. RSU offers its students to use Office365, providing an option to use full Microsoft Office, OneDrive file storage without additional fee. While studying at RSU, students have access to all the software necessary for a successful study process. The student can install Microsoft Office software, Word, Excel, PowerPoint, OneNote on five computers (Windows or Mac) and five mobile devices (e.g. a smartphone, a laptop and a tablet). Students may use OneDrive of 1 TB for automatic synchronisation of devices. With Microsoft Office 365 synchronisation, RSU students can see their class and lecture schedules on their phones and other smart devices. The service is available using the built-in calendars on smartphones or via Microsoft Outlook application. Students can share files using the RSU student account OneDrive cloud service. RSU students and employees have access to a modern application system (JIRA) on the platform help.rsu.lv in order to receive necessary IT or other support.

Mapping system for study programs For more efficient management of the study program, the introduction of the mapping system for study programs has started. The catalogue, descriptions, learning outcomes and implementation plan of the study programs and directions implemented at RSU are available in the mapping system for study programs. The system sections are listed in SAR under point 2.3.4. p.44.

According to the SAR (point 2.3.4. p.45.) RSU administrative staff have the possibility to use the Student Information System (SIS), where all RSU student data is available, such as student admission data, final grades and study courses. The Academic Portal is the user interface of the Student Information System through which RSU academic staff, Directors of study programs, Heads of departments and other staff involved in the educational process can access certain data sets located in the Student Information System.

The Academic Portal was developed for RSU needs to provide access to information from various RSU information systems related to the study process at RSU, such as register of study courses, clinical skills register, survey results, feedback to students related to the survey results, etc. The modular structure of the Academic Portal is based on the Microsoft SharePoint platform.

RSU Centre for Educational Growth regularly organises continuing education courses on both face-to-face and remote teaching and learning, as well as advises teaching staff on the application of appropriate pedagogical methods and optimal selection of e-learning support tools. In order to improve the skills of the teaching staff, the IT Department regularly organises thematic training sessions on IT tools, as well as provides an opportunity to apply for online one-to-one consultations with experts in improving the digital skills of the teaching staff. Consultations are mostly provided using one of the communication platforms (Zoom, MS Teams).

More detailed information is available in the Annex 23.2 “Assessment of the information and methodological provision regarding IT infrastructure and available resources”.

The information and communication technology solutions used to ensure the study process are appropriate and effective. While it was neither discussed nor suggested during the assessment visit, it is clear that the IT infrastructure could provide an opportunity to provide additional services outside the classical study programs, allowing to sell separate courses for additional income.

Criterion:

1.3.5. According to the SAR (point 2.3.5. p.45.) When developing a new Study program, academic and research staff in compliance with provisions of Section 55, Paragraph one, Clause 3 of the Law on Higher education Institutions and the Law on Scientific Activity is involved for its provision. Academic and pedagogical staff with high qualification, relevant competence and good reputation are involved in the implementation of the study direction and achievement of results. The process of recruitment and evaluation of lecturers is transparent, effective and one of the prerequisites for high quality of the study process. At the study program level, the duty of the director of the study program is to ensure the compliance of the content of the study program with internal and external laws and regulations, requirements of the labour market, sectoral development trends and needs of students, to analyse data that might provide information about factors affecting learning outcomes and quality of the study programs and to implement necessary improvements to the study programs. Quality indicators of study programs that are directly linked to the remuneration of the directors of the study programs are measured at the level of the study program.
According to the SAR (point 2.3.5. p.46.), at RSU level, the duty of the management is to set strategic and quality aims and quality policy, to make a decision on quality approach, to manage resources, and set the internal procedures. Supervision of the implemented system in RSU is carried out both by internal system and quality auditors, and independent external experts. One of the indicators of study quality at the University level is the public attitude and opinion, as well as the popularity of RSU. It is regularly established by participating in a reputation survey and brand evaluation. More information on the procedures for attracting and/or employing the teaching staff is available in the Regulations on academic elections specified in Annex 1 and in the Process description No. 29 “Academic Staff Elections” and in the Part 1, Paragraph 1.10 of Annex 23 Compliance of the study direction with Part 1 of the standards and guidelines for quality assurance in the European higher Education area (ESG).

1.3.6. According to the SAR (point 2.3.6. p.46.) academic and research activities at RSU are carried out by distinguished and highly regarded permanent employees elected to academic positions. In order to ensure comprehensive knowledge and skills appreciated on the labour market, educational staff performing the duties as the teaching staff only for a certain time are involved in addition to the permanent staff. The staff includes industry experts and teaching staff elected in other higher education institutions,
Annex 6.2 provides biographies of the teaching staff attached electronically (Curriculum Vitae in Europass format). Annex 6.1 (in Excel format) provides basic information on the teaching staff involved in the implementation of the study direction, specifying their degree/qualification, election status at the higher education institution, study program and study courses, in the implementation of which they participate, and certification of knowledge of the official language and foreign language (if applicable). Annex 24.6./24.7 shows the analysis of the teaching staff data.
In order to ensure the fulfilment of functions in support of the training and study process, record keeping and quality management, human resources and financial management, and the solution of legal issues, RSU employs general and administrative staff, that constitute one fourth of the number of employees. At the same time, the operating staff is responsible for the management of the buildings and the territory, for the development of the infrastructure, etc.
According to the SAR (point 2.3.6. p.47.) The academic staff application and selection procedure at RSU is regulated by internal regulations. Qualification for an academic position takes place according to the requirements set for the job in the Law on Higher Education Institutions, the tasks of academic positions defined in RSU Constitution and the election procedure of RSU on the basis of the individual's: education, experience, competences, potential, achievements, scientific

contribution, teaching skills, service record, recommendations of experts and sectoral representatives.
The career development of academic staff is one of the main ways RSU can affect the renewal of human resources for research and studies. RSU Centre for Educational Growth was established in 2014 to increase the quality of studies and improve the competence of teaching staff. Within the scope of its operations, it provides support in the improvement of the quality of studies by analysing the study process, providing support and advising teaching staff on the study programs, updating of courses and organising pedagogical growth of academic staff in continuing education activities according to current needs. The education activities offered by the Centre are based according to the following thematic blocks:
pedagogy (university didactics and education management),
technology-enhanced learning and teaching (information and communication technologies, digitisation),
transversal competence (e.g., skills to communicate, collaborate, innovate, improvise, work interdisciplinary and data-based research).

So far, the Centre has developed more than 40 different training activities, the format of which is adapted to the goal to be achieved. These can include interactive workshops, seminars, conferences, think tanks, thematic cycles, guest lectures, simulation-based scenarios, etc. Since March 2020, training has been conducted remotely, maintaining the same level of participant involvement as in face-to-face training activities, but allowing a wider range of participants to join the training activities. Within the framework of one semester, approximately ten thematic cycles are implemented for more than 140 academic hours. Interest in offered activities continues to increase.
At the beginning of the Centre's activity, thematic activities focused mostly on defining learning outcomes, assessment of the learning outcomes and development of the pedagogical design of the study course, focusing on basic pedagogical regularities. Over time, these topics have been supplemented by a wide range of training activities for the improvement of pedagogical and digital skills of the teaching staff. The great work invested in upgrading digital skills showed its efficiency during the pandemic with the onset of remote work. The Centre, in active cooperation with RSU information Technology Department, carried out a huge number of training activities on the use of the communication platforms Zoom, Teams, the use of the e-learning environment Moodle, the organisation of remote group work in the Miro tool, the development of interactive digital scenarios in the Twine environment, the creation of self-check tasks on THE H5P platform and the use of many other digital tools in the study process.
According to the SAR (point 2.3.6. p.48.), the Centre for Educational Growth conducts mostly counselling activities, which has provided substantial support for the improvement of pedagogical and digital skills of the teaching staff and for the meaningful implementation of the technology-enriched study process, especially during the period of remote and hybrid studies.
The teaching staff involved in the implementation of the study programs included in the study direction "Wildlife Sciences" have access to the entire content of continuing education offered by RSU Centre for Educational Growth, which is updated every semester. Contribution to the quality of the study process is provided by the fact that thematic studies are attended not only by the teaching staff, but also the support staff involved in organisation of the study process in order to promote pedagogical understanding of the study process and strengthen effective cooperation with the students. Each semester of the academic year, relevant content in various process forms corresponding to the research of the lecturers' needs is offered.
The English language training project assessment was included in the questions of RSU Employee Satisfaction and Engagement Survey in 2019, confirming that 85% of the employees who participated in the survey (a total of 731 employees) consider the English language proficiency testing and training project as an opportunity to improve their qualifications. At the same time, with

regard to ensuring the development of improvement of the lecturers' competences, most of the 367 lecturers - 86% have answered affirmatively to the statement "I receive sufficient support for the improvement of my pedagogical competence".
During the assessment visit the academic staff described their pedagogical approach in simple terms and avoided describing their approach using explicitly pedagogical terms, for example, when asked about their personal approach to both summative and formative assessment the response did not really fit the question, however after the interviews it was clear that plenty of elements from both assessment types are actually used.

1.3.7. According to the SAR (point 2.3.6. p.46.) RSU promotes a balanced workload for lecturers, and promotes a healthy lifestyle to reduce and eliminate the risk of burnout for teaching staff.
According to the SAR (point 2.3.7. p.49.) the teaching staff involved in the implementation of the StD and StPs plan their pedagogical workload according to the study program for each semester and academic year. Individual study courses are organised in modules and the workload is reviewed in accordance with the need and provisions of laws and regulations.
Full-time university lecturers are required to participate in research activities that are regulated by staff job descriptions. Depending on the type of academic position, the proportion of duties and responsibilities of the employee in scientific and research activities has been determined. The division of responsibilities within a structural unit may be changed by the head of the structural unit in agreement with the employee, according to the planning of the pedagogical work and the projects to be implemented. Results of the research activity of the academic staff are summarized once a year and included in the research activity report. For some groups of the staff, they are related to the principles of remuneration and motivation. Achievements of the teaching staff can be seen not only in their personal CVs, but also in RSU Research information Management system (ZDIS pure), where information on the scientific performance of structural units and academic staff is added, compiled and maintained.
RSU is constantly planning and implementing activities aimed at motivating the academic staff to engage in high-level scientific and research work, in particular associate professors and professors (aiming to reach 60% of working time spent on research), which will encourage new specialists to engage in sectoral research, and contribute to the overall development of science at national and international level.
The amount of teaching staff involved in the study field is sufficient for the current amount of students, but during the assessment visit it was noted that in order to assure quality the amount of students should not rapidly increase. Teaching staff is often involved in multiple courses and other study programs (for example, Medicine program is mentioned multiple times in the SAR), so it is difficult to objectively evaluate their workload just based on the SAR of this study field. During the assessment visit the experts had the impression that teaching staff don't have enough time for discussions and reflection.

1.3.8. According to the SAR (point 2.3.8. p.50.), RSU student with special needs is an RSU student with functional restrictions requiring adaptation of the study environment and process in order to create equal opportunities to receive the higher education. RSU supports students with special needs in various stages related to studies – selecting a suitable study program, when enrolling with the higher education institution, and in the study process (study materials, taking examinations, etc.) and creating appropriate social and physical environment. (e.g., availability of the environment of the medical Education Technology Centre, information in Latvian, in English). The aim of the support measure is to promote the independence and inclusion in the study process of the students with special needs. Guidelines and support policy have been developed regarding support to RSU

students with special needs (information in Latvian, in English).
Since 2012, all RSU students have access to psycho-emotional support. The service was introduced with the aim of helping students to overcome adaptation problems when starting their studies, reducing the emotional manifestations of stress, stress-related health disorders, psychosomatic disorders or illnesses, overcoming relationship-building difficulties and crisis situations. A human being is a single entity, and only an emotionally stable and balanced student rarely gets sick and achieves more. The availability of the service has been appreciated by both local and international students. The student may choose to attend group or individual visits to the resident physician. The introduction of the service has helped to reduce the number of students who have dropped out of the study process, and has helped to increase the efficiency of study work by reducing students' stress and adaptive disorders.
RSU has a Career Centre (information in Latvian, in English). The Career Centre is an active member of the Latvian Career Development Support Association (LKAAA). LKAAA is a nongovernmental organisation established with the aim of promoting the development of the career development support system (KAAS) intended for strengthening the national economy and wellbeing of the people of Latvia. LKAAA cooperates with the European Commission Career guidance and information network Euroguidance. In Latvia, Euroguidance is represented by the Information and Career Support Department of the State Education Development Agency. Euroguidance aims to promote the policy and practice of the KAAS by providing information to policy makers and support to career guidance counsellors and other actors in the system.
According to the SAR (point 2.3.8. p.51.), the International Department (ID) provides informational support to the international students who have confirmed their desire to commence studies to ensure their successful and swift integration in the university and Latvia. The new international students electronically receive an invitation to RSU Orientation Week, informative edition of Survival Guide, internal rules and regulations of the higher education institution, as well as other regulatory study documents and a sample of a study contract in Latvian and in English, also information on various accommodation options in Riga, etc. RSU website in English offers wide information on RSU and life in Riga. To make the life of the students easier, the university offers several housing options, including RSU Halls of Residence at Dārza iela 5, Riga, which was built at the end of 2017. The ID provides support to third-country nationals in handling immigration procedures.
One week before the beginning of each semester, the ID organises Orientation Week during which international students are informed about the university, studies, assessment system, students' rights and duties, students' e-systems, immigration and residence aspects, the Latvian culture and language. During the Orientation Week, international students learn about various RSU departments (for example, Student Services, Information Technology Department, Library, faculties, etc.) and the available support. RSU student organisations - RSU Student Union and International Students' Association, are also involved in the events of the Week. In cooperation with the ID, they provide a cultural program for the new international students.
Mentor program is maintained with the aim of helping the new international students to adapt to the higher education institution. Even before the new students arrive in Latvia, they may contact previously trained mentors, senior local and international RSU students. Before the beginning of each semester, the ID organises an informative exhibition, providing an opportunity for the new international students to obtain information, for example, about various RSU student organisations, amateur groups, sports Club, outpatient health and psychosomatic assistance.
The experts agree that RSU is fully capable of providing support for all types of students and this study field is unlikely to create unique challenges.

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

Conclusions:
It is clear that both physical and IT infrastructure are fully sufficient to ensure the needs of study field and relevant study programs. There is noteworthy interest in artificial intelligence which is not expressed in the documentation and will likely be an interesting topic to unravel in the future. RSU knows their strengths very well and explains them in great detail, but the same can not be said about their weaknesses and risks.

Strengths:
1) IT infrastructure is extensive and well developed allowing great remote and hybrid learning possibilities
2) The premises are very well equipped and are continuously improved.
3) Library items and equipment are widely available and accessible
4) Academic staff is both required and motivated to do research

Weaknesses:
1) While there are plenty of internal systems and regulations to prevent that, it is unclear if the amount of teaching staff involved in this Study Field is optimal to ensure balanced workload between teaching and doing research.
2) Funding for RSU institutes is not sufficient to fully use their potential
3) Personnel of all levels has difficulty listing detailed risks and weaknesses beyond the few obvious strategic risks.

1.4. Scientific Research and Artistic Creation

Analysis

1.4.1. RSU supports and promotes interdisciplinary and intersectoral research. From 2021 a new research activity information system RSU Research Portal was introduced. The system offers the opportunity to exhibit research results more publicly and to see the true network of cooperation at the level of people and organisations. In 2008 a Technology Transfer Office was created at RSU. It maintains communication with the private sector and organises cooperation i.e., contract research, commercialisation offers to companies etc.(SAR p. 53, p. 59). Researchers conduct not only fundamental and applied research but also collaborate with industry in the country and Europe, as well as with other research institutions,e.g. Rudolfs Cimdins Riga Biomaterials Innovation and Development Centre, University of Latvia, Tartu University, Uppsala University, Pharma and Chemistry Competence Centre of Latvia Ltd, IQVIA Inc. (SAR p. 61, Annex 6.2). The directions of scientific research are relevant for the study field and industry. In the Wildlife Sciences, research takes place mainly on Medical and Public Health Platforms and among all other areas covers such leading fields as genetics, microbiology, virology, epidemiology, healthy ageing and longevity. RSU supports data-intensive research and research involving the re-use of data. To achieve the development goals, a particular promotion of research in the Wildlife Sciences is planned, not only by supporting existing research topics, but also by encouraging the development of new research areas and investment in infrastructure. One of the first steps in that direction is the establishment of a Bioinformatics Laboratory (SAR p. 52).
During the assessment visit, the management staff showed that they have clear ideas about the institutional goals related to research and its role in study programs. The RSU vision is to be a leading science university in Europe where excellent research- and practice-based education are provided. The priority goal is the creation of locally and internationally significant research results.

To promote research and help researchers at the initial stage of their careers, RSU has established the following practices: RSU internal grant system, joint RSU and Riga Technical University grant program for multidisciplinary research, co-financing for international cooperation networks and mobility, cooperation with RSU Alumni Association and the Boris and Inara Teterev Foundation (SAR p. 36). RSU also provides financial support for the payment of high citation publications and participation of academic staff in scientific conferences (SAR p. 54).

1.4.2. The connection of scientific research with the study process is carried out mainly through the preparation of the master's thesis. The research process is performed in scientific institutes of RSU (for example, RSU Institute of Microbiology and Virology, RSU Institute of Oncology, RSU Institute of Anatomy and Anthropology) or other scientific institutions (for example, BIOR Institute, Riga Technical University, University of Latvia) under supervision of experienced scientists (Annex 22). The research results are also incorporated into teaching through student presentations and discussions with the students. The involvement of students in the implementation of research projects also ensures the link between teaching and research and helps students to acquire new knowledge and improve their practical skills. As an example, in 2022 students (1) draft the paper "Changes in the intestinal microbiome in breast cancer patients during neoadjuvant therapy" supervised by a lead researcher at the RSU Institute of Oncology; (2) draft a paper within the framework of the RSU scientific project " Fibromyalgia-specific microbiome, viral infection and immunological profile" under supervision of a lead researcher at the RSU Institute of Microbiology and Virology (SAR p. 54). On the other hand, there are links between the research lines of academic staff and the courses they provide. Some examples of good practice : (1) a lecturer who teaches the study course "General Pathology" is active in the research topic of pathogenesis or (2) a lecturer who teaches the study course "Microbiology" "Virology" also conducts the research on those topics (SAR p. 56, Annex 6.4, Annex 6.1, Annex 6.2, ORCID IDs).
The connection process of research with study is logical and well-functioning. Students improve their skills and knowledge, gain more experience and competence.

1.4.3.International cooperation in research takes place mainly through research projects. During the period of 2017-2021, a total of 130 international research projects were submitted, of which 39 were funded. These include 13 Horizon 2020 projects and 9 ERA-NET projects. To promote international cooperation, RSU is a member of some international research infrastructures (EATRIS, BBMRI, EOSC, SHARE), also organises international conferences and supports international symposiums and conferences organised by other scientific institutions. Some lecturers are involved in the organisation of international societies conferences (SAR p. 55). RSU is active in international cooperation programs such as COST Actions, ERA-NET and others. RSU has welcomed foreign visiting researchers who read lectures, participate in Researchers' Breakfast, that is, a networking event for academic and scientific staff, in which research matters are discussed. The visiting researchers are internationally recognised scientists and transfer the knowledge valued by the international scientific community. RSU has the intention to extend international cooperation primarily with the universities in Baltic countries (e.g., Lithuanian University of Health Sciences). RSU concludes cooperation agreements with leading scientific institutions; however, more details are not presented (SAR p. 55).
International cooperation in the field of scientific research within the study field and the relevant study programs can be considered satisfactory. The number of international projects should be increased.

1.4.4. In order to achieve scientific goals, RSU developed diverse strategies for the participation of the teaching staff in scientific research, that is, a motivational remuneration system; financial support for open access publications in the journals included in Web of Science and SCOPUS databases, practical support for project preparation and implementation provided by the Development and Project Department and the Technology Transfer Office, networking activities for the academic staff related to research funding and connection with industry (SAR, p. 14-15, p. 56). The developed mechanisms are efficient and well-functioning and positively affect research results. The number of scientific articles published by international publishers in indexed journals is constantly increasing. Many of the teaching staff are involved in the scientific project's implementation. However, many of the projects are funded by the RSU or Latvian Council of Science (Annex 13.2). Of 115 projects implemented in the study direction Wildlife Sciences during the period of 2017-2022, about 70 % of them are national ones. (Annex 13.2). The participation of teaching staff in international research projects should be increased . In general, the implementation in international research projects will ensure world-class research, increase the citations of teaching staff scientific publications and support research-based high-quality higher education.

1.4.5. The study field has a clear and effective plan for student integration in research activities. The strategy includes the involvement of students in research projects, formation of student research interest groups, creation of the portal Science Platform, organisation of International Student Conference (SAR, p. 57). Students have the opportunity to present their research results related to the Master's thesis. Students are motivated to participate in the conference by obtaining a higher assessment of the master's thesis. RSU Student Union implements the project "Academy of Researchers". It also stimulates the involvement of students in research activities. To participate in conferences or seminars within or outside the country, students can apply for financial support from the Student Union; however, the number of students receiving the support is not high. Each year more than 10 students receive financial support for participation in conferences (SAR, p. 57-58)
During the assessment visit, the teaching staff provided suitable information about the student integration in research. The difficulties related to the funding of student research activities were also stressed. Because of high research costs in the field of the Wildlife Sciences, the opportunities of laboratories to accept students are particularly dependent on the science funding. Higher funding will increase students' participation in research activities and improve their knowledge and skills for further activities. In spite of laboratory opportunities for Master thesis drafting being fully provided, the higher funding will provide significant support for the students' research process and its quality.

1.4.6. In RSU, guidelines were developed that help teaching staff understand the innovative teaching principles and modernise their study courses. The attention is paid to two types of innovations:1) methodological innovations – promotion of studies based on research, projects, problem solutions and 2) technological innovation – the use of H5P, Miro, 3D printers and other solutions to develop a technology-enriched study process. At RSU, training and exchange of good practice experience sessions are organised in order to promote the culture of learning and teaching innovations.
Institutional management pays appropriate attention to innovations. During the assessment visit, the expert panel was introduced with all innovative technological solutions implemented in the study process, e.g. E-learning environment, recording room for recording high-quality audio and video content for lectures and online events as well for recording podcasts, communications platforms (Zoom, MS Teams) for the implementation of remote studies, etc.

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

Conclusions: The management staff have clear ideas about the institutional goals related to research and its role in study programmes. Interdisciplinary and intersectoral research is supported. An effective and well- functioning mechanism is developed for the participation of academic staff into research. Teaching and research are well integrated, students are implemented in the research process. The management staff pays appropriate attention to innovations in research, teaching and learning. International cooperation in research occurs mainly through research projects. However, the number of international projects is insufficient and should be increased.

Strengths:
1) Effective mechanisms for the involvement of academic staff into research
2) Appropriate attention to innovations in the study field.

Weaknesses:
1) Low number of international projects
2) Insufficient funding of students' research projects
3) Insufficient funding of students' participation in scientific conferences

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

The management staff have clear ideas about the institutional goals related to research and its role in study programmes. Interdisciplinary and intersectoral research is supported. An effective and well- functioning mechanism is developed for the participation of academic staff into research. Teaching and research are well integrated, students are implemented in the research process. The management staff pays appropriate attention to innovations in research, teaching and learning. International cooperation in research occurs mainly through research projects. However, the number of international projects is insufficient and should be increased, but it is only for improvement and doesn't affect evaluation.

1.5. Cooperation and Internationalisation

Analysis

1.5.1. There is a wide-range cooperation with different institutions in Latvia, and specified the choice of cooperation partners according the SAR (p. 62) to three main criteria for the academic master study program "Biomedicine": 1) biomedical research is carried out in a cooperation institution of higher education or research institute (the publications thereof are included in the SCOPUS database); 2) the partner represents the biomedical industry and is a potential employer for the graduates of the programme; 3) professional associations related to biomedicine.
In the SAR (pp. 62-63), it is stated that cooperation with Latvian higher education institutions is not necessary for provision of the "biomedicine". However frequent cooperation occurs regarding supervision of master thesis of the program which highly contributes to the achievement of aims and learning outcomes of the study field. Several examples of institutions providing placement are provided in the self-assessment report and in Annex 9.2, such as supervision at Riga Technical University, University of Latvia, Latvian Biomedical Research Centre, and the Institute of science

BIOR. Cooperation with the Latvian Association of Laboratory Specialists (Association of Laboratory Physicians) has also changed the regulations for the speciality “Laboratory Specialist” (Registered under No 080607; 26.10.2017 LLSB), thereby opening opportunities for graduates with a “Mg. biomed.” degree to certify and work in clinically diagnostic laboratories.
As for the biostatistics program, cooperation with colleagues from the University of Latvia were involved in the development of study courses and related materials with their ideas, experience and knowledge (SAR p. 62) . Since the biostatistics program has just started, other cooperation has not yet been developed, however the self-assessment report mentions that there is an intention that students will have the possibility to undergo placement at BIOR and at the Latvian Biomedical Research and Study Centre. The interview with employers highlighted the need for biostatisticians in the labour market, and there is a strong potential in collaboration. Again, this cooperation contributes to the achievement of aims and learning outcomes of the study field and due to lack of teachers with a statistics degree at RSU, is even essential for the this part of the study field. One potential risk in collaboration if the the lack of skilled biostatisticians in Latvia and outside supervision could prove to be difficult to find.
Also, it should be mentioned that RSU on a central level has a career week. Also, National Examination Boards and Committees for defence of Master and Bachelor’s theses comprise at least 50% of employers, as is established by the Cabinet Regulations No. 481 of the Republic of Latvia, and the compliance with these Regulations is strictly controlled at RSU.
Overall, the selection of cooperation agreements are clear and justified.

1.5.2. International cooperation is an essential part in the implementation in the study field and contributes to the aims and learning outcomes of the study field. In the self-assessment report, it is written that partners are selected based on similarity of study programs and the scientific quality (SAR, p. 64).
As for international cooperation and the academic master study program "Biomedicine", an exchange collaboration with Coventry University was unfortunately cancelled due to UK withdrawal from EU. However, some irregular teaching collaborations with Coventry University still occur. Also, there are visiting teachers in biomedicine from University of Health Sciences in Lithuania and the University of Edinburgh, as shown in Annex 8.1.
In relation to the above mentioned, it should be mentioned that several staff member teaching at the biomedicine program are also involved (or has been in involved) in international EU programs. A total of 6 large programs are mentioned in the SAR (p. 64-65) and these collaborations create an international environment that has a positive impact on the level of research being conducted. This in turn is important for the quality of the study program in biomedicine.
As for the biostatistics program, it relies heavily on international cooperation. Colleagues from Uppsala University, Chalmers University of Technology (Sweden) and Tartu University (Estonia) have participated in the development and development process of the biostatistics program. The plan is that they will continue to teach the courses for which they developed study materials. It should be mentioned that the partners are well-recognized in the academic community with much experience, which strengthens the biostatistics program. Because the biostatistics program is new, these collaborations can even be considered essential as all the teaching resources needed to teach the biostatistics program does not yet exist at RSU.
As for international student mobility, there are no international visiting students according to Annex 8.1.

1.5.3. In the self-assessment report no reference is made to any formalised system and procedure. However, the SAR (p. 65) mentions RSU is part of the established framework of the Erasmus+ program which enables bilateral cooperation and EU-funded projects. This relies on the individual

initiatives of teaching staff, who together with the receiving higher education institution develop a lecture plan of suitable content. Main condition of a teaching visit within Erasmus+: the lecturer must provide at least eight academic hours that can be both lectures and seminars. Guest lectures must be given in accordance with the Common European Framework of Reference for Languages.
Appendix 8.1 shows that RSU has been able to attract a number of visiting lecturers, both within biomedicine and biostatistics, and is in fact an essential part of the biostatistics program. Also, even though the biomedicine study program has been implemented in Latvian, have students appreciated the work of visiting lecturers. This is an important contribution to the study process and the quality of studies as it adds scientific competence that at the moment cannot be provided at RSU. In short, without incoming mobility the biostatistics program could not be provided.
An important observation is that there is a very limited student mobility, in fact there are no international visiting students according Annex 8.1. Having international students is a marker of being an international research university and international students create a dynamic educational environment. In the long run, international students could be attracted to the Latvian labour market and in the end will perhaps contribute to the competence at RSU. In the long run, no international student could negatively impact the competence at RSU and other research institutes in Latvia.
Biostatistics is provided in English and should be able to attract students from abroad. Also, biomedicine is now provided in Latvian, but from the panel visit clearly the staff is able to teach in English if international students arrive.

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

Conclusions:
The study, overall, has several collaborations of high quality with relevant institutes, nationally and internationally. This is especially the case for teachers involved in research connected to the biomedicine programme, while the biostatistics programme relies on lecturers abroad..
There is potential for increasing student mobility, provided that the study programmes are provided in English. Both biomedicine and biostatistics are international subjects and with a labour market demand that is high.
Lack of biostatisticians with PhD in Latvia could make external supervision difficult to find, but this is not a weakness of the programme but more a practical aspect of the situation in Latvia.

Strengths:
1) Well-grounded choice of cooperation partners within Latvia for biomedicine.
2) Excellence international research programmes within biomedicine, that positively contributes to the aims of the study field.
3) Strong international partners for the study courses in biostatistics.

Weaknesses:
1) Lack of research cooperation within biostatistics.
2) Limited student mobility.

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: Fully compliant

RSU has several high-quality collaborations with relevant institutes, both nationally and internationally. This is particularly true for teachers involved in research connected to the

biomedicine program, while the biostatistics program relies on lecturers from abroad.
There is potential for increasing student mobility and a lack of a clearly defined strategy for developing internationalization, but this is only an area for improvement and does not affect evaluation.

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

Analysis

Criterion:
1.6.1. In the previous assessment procedures related to the study field and the corresponding study programmes:
• accreditation;
• licensing of study programmes (if applicable);
• in the evaluation of changes to the study programmes corresponding to the study field (if applicable);
• the inclusion of the study programme on the accreditation form of a study field (if applicable).
the recommendations provided are / have not been fully or partially implemented. The contribution of the higher education institution / college to the analysis of recommendations and their application to the specifics of the study field and the corresponding study programmes is evident.

Analysis:
1.6.1. According to the information provided in "Self-estimation Report, RSU, 2023 and the associated Annexes 11, Conclusions of the Evaluation Experts of 16 December 2011, and Conclusions of the Evaluation Experts of 7 August 2018 on the Assessment of Changes in an Accredited Study Direction'', there have been various recommendations received for the study field as well as the study programs implemented in the study field.

Short-term recommendations for the elimination of identified deficiencies in the academic master study program "Biomedicine":

Recommendations by the experts in 2011:
1. The study programme should be developed in cooperation with other higher education institutions, (for example, University of Latvia, Daugavpils University, Latvia University of Wildlife Sciences and Technologies) or should be implemented not only in Latvian, but also in English.

This comment has been fixed as RSU has significantly risen in the World's University rankings, which made it possible to establish a modern study program that is relevant to scientific developments in the branches of the biomedical sector and to the needs of its labour market and is implemented with the involvement of RSU research institutes, and other Latvian (especially Rīga Technical University) and international partners, and representatives of the biomedical industry (the BIOR Institute, the Latvian Biomedical Research and Study Center).

2. "Rīga Stradiņš University could be responsible for medical courses, laboratory facilities and student supervision."

This comment has been fixed since RSU has significantly improved the material and technical provision for the study labs so that students acquire their theoretical and practical skills and knowledge in modern labs equipped with all the equipment necessary. Also, the renovation and construction of RSU buildings for departments and institutes involved in implementing study programs improved the study conditions in all those subunits of RSU.

3. "To maintain sustainable and efficient studies, 15- 20 students need to be enrolled in the programme, which is too many on the scale of Latvia, but could be achieved by developing international study opportunities."

This comment is partially addressed. The number of students has increased, especially after the degree to be obtained was changed to "Master in Biomedicine" in 2018. It is important to note that the development of the study field and especially the academic master study program "Biomedicine" was seriously affected by the COVID-19 pandemic. Since the biomedical field is expensive, the tuition fees are high relative to the average income in Latvian. However, economic development is significant in Latvia and the biomedical industry and the benefits of acquiring a master's degree in biomedicine will soon outweigh the costs of tuition fees.

Recommendations by the experts in 2018:
1. "Planning the creation of the Bachelor's study programme “Biomedicine” is to be supported in order to promote the recognition of the academic degree of biomedicine to be obtained in Latvia."

This comment has been partially addressed because there is a substantial development observed concerning the Master’s study program "Biomedicine." In contrast, the Bachelor's study program in “Biomedicine" requires the evolutionary development of the state, the industry, and RSU itself, including the state support for the bachelor program students in "Biomedicine." This may take several years, and it depends more on extrinsic factors than on intrinsic ones. Although the recognition of the academic degree in biomedicine has not been finished yet, it is a matter of the near future as RSU has always been a thriving university in inventing innovations.

2. "The involvement of students of the Master's study programme “Biomedicine” in scientific research in laboratories both in Latvia and abroad should be encouraged."

This comment has been fully addressed as the group of experts in 2023 found that most of the Master theses in "Biomedicine" and "Biostatistics" are under the supervision of senior researchers of RSU's research institutes, and many leading researchers from other Latvian research universities and institutes are involved in teaching and supervising the students of the study field "Wildlife Sciences" of RSU.

Short-term recommendations for the elimination of identified deficiencies in the study program "Biostatistics":

Recommendations by the experts:

1. "The list of learning outcomes to be achieved in the study programme, especially competencies, should be specified and supplemented until the admission of students."

This comment has been fully addressed as the learning outcomes of the study program have been specified, and the eighth learning outcome to be achieved is supplemented with the competence to participate in the consultation process.

2. "The learning outcomes to be achieved in the study courses and the study programme should be specified by the beginning of the implementation of the study programme, so that all the learning outcomes of the programme are achieved by students regardless of the selected restricted elective courses."

This comment by experts has been addressed as the number of results to be achieved is reduced from 15 to 8. It is also pointed out that students achieve all the outcomes with both compulsory and restricted elective courses, which is indicated in the corrected map of the study program learning outcomes.

3. "Before implementing the study programme in the form of distance learning, both pre-recorded classes and other study materials should be introduced in all study courses, which students can learn without participating fully in online classes."

The group of experts found lots of study materials added to the e-studies system of RSU, including PowerPoint presentations, databases for student independent work, examples of R script codes, recommended references, and literature.

4. The distribution of topics should be balanced between civil defence and environmental protection until the start of teaching of the study course “Civil Defence and Environmental Protection”.

This comment has been addressed as the study course has been changed to the more appropriate one.

Long-term recommendations for the improvement of the study program "Biostatistics":

1. Changes to the education classification of Latvia should be encouraged in cooperation with other higher education institutions in Latvia, supplementing it by including a group of biostatistics programmes, so that degrees corresponding to the name and nature of the programme can be awarded in academic study programmes; in this case, a Master's degree of natural sciences in biostatistics.
This is an important comment which has not been addressed fully yet. However, the discussions have already been initiated, and the possibility of encouraging changes in the education classification of Latvia and awarding the program graduates a more appropriate degree, such as a master’s degree in natural sciences in biostatistics, is ongoing. On the other hand, this point is not critical.

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

Conclusions:
There are noticeable substantial improvements made within the study programmes based on the recommendations received from the previous accreditation. The contribution of RSU and the

Director of the study field to the analysis of recommendations and their application to the specifics of the study field “Wildlife Sciences” and the study programme “Biomedicine” is evident.

Strengths:
1)The staff of the study field "Wildlife Sciences" and the study programs "Biomedicine" and "Biostatistics" have been working hard to address the recommendations and comments received. All major shortcomings are addressed, the study process has been significantly improved, and more progress and success are to be expected.
2) The study programs "Biomedicine" and "Biostatistics" are expected to be important to ensure future research and industrial development on the national and international scale. Therefore, both study programs are essential for RSU.
3) Teaching staff of the study programs “Biomedicine” and “Biostatistics” are constantly connected with researchers and lecturers of all other research universities, investigators of major research institutes, and government bodies, which makes their approach to science and student teaching multidisciplinary, collaborative, and diverse.
4)The teaching staff is involved in research activities, and their publication rate is high.

Weaknesses:
1) Not all the recommendations have been managed to be implemented fully. However, the study field belongs to the expensive part of Wildlife Sciences, which explains (1) the slow rise in the number of students, especially in the study program "Biomedicine"; (2) the general lack of state support for the students in this study field does not promote any revolutionary changes to be implemented. Instead, the experts expect an evolutionary type of study field development.
2) The study course “Biomedicine” is not currently taught in English. However, this is not because the teaching staff cannot do this; experts found that all lectures and professors can teach any course in English. Moreover, representatives of both study programs are tightly connected with scientists from the world's leading universities.

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: Fully compliant

Substantial improvements have been made by implementing the recommendations obtained in the study field and the associated study programs. Experts could not identify any significant lack of funding for research (except for resources to support the students' scientific work), lack of publications in international journals, lack of incoming international students, or decrease of enrolled Latvian students. Instead, both the study field and the academic master study program "Biomedicine"and "Biostatistics" are well-established and ever-developing study directions tightly connected with research on national and international levels, where students are enthusiastic about their future, while alumni and stakeholders are fully satisfied.

1.7. Recommendations for the Study Field

Short-term recommendations

1)Teaching staff needs to exchange information on each student's progress to uncover student challenges and make necessary adjustments before they turn into problems. This should be taken into account when evaluating the workload because it will require additional time.
2) The information about the study programmes and study field needs to reflect the same information in english as it does in latvian (for academic master study program "Biomedicine") and for the study field and both programmes, a more in-detail study course descriptions should be added in the RSU website in both languages.
3) International cooperation in research should be intensified by increasing participation in international projects.
4) Find and create more collaboration with skilled biostatisticians within Latvia.
5) Create a strategy to attract more students as experts think the study program needs to be advertised more to attract the attention of prospective students.
6) There is limited student mobility. Create a strategy to increase student mobility.
7) Collaborate internationally to increase research in biostatistics.
8) Continuing to work with previous recommendations
9) Showcase how specific statistical data and the information of the e-studies system is used in order to improve the study field.
10) It is recommended to highlight the measures taken to ensure the quality of study programs through surveys and student representatives, as well as the utilization of material and technical resources. Additionally, emphasis should be placed on the incorporation of planned new study courses into the existing system.

Long-term recommendations

1) Creating the Bachelor's study program “Biomedicine” is advisable since it would support the existing Master's program in this study program, and a wider recognition of the Master's degree and the attraction thee local and international students to the study field "Wildlife Sciences" and the study programs "Biomedicine" and "Biostatistics".
2) In order to conduct the recommendations from the employers regularly, a centralised approach needs to be put in place for programmes with a smaller count of graduates.
3) Risk assessment system should be updated by clearly defining the criteria, appropriate level of detail and required risk reduction activities. The experts are not implying that it needs to be more detailed beyond the main strategic risks - the risk assessment procedure should be clearly defined and understood. Head of the study field should be well aware of the risks and weaknesses in comparison to the globally available options (exceeding the weaknesses identified in this assessment) for each study programme.
4) Funding for research activities should be improved to fully utilize the capabilities of existing RSU institutes and to provide the students with additional research options

II - "Biomedicine" ASSESSMENT

II - "Biomedicine" ASSESSMENT

2.1. Indicators Describing the Study Programme

Analysis

2.1.1.The academic Master's study program "Biomedicine" (45421) complies with indicators, conditions, and criteria of the study field of Wildlife Sciences. The length of implementation of the study program, which is 2 years, is evaluated as sufficient for acquiring the necessary skills and way of thinking to enter the labour market.

2.1.2. According to the SAR p. 213, the title of the study program is “Biomedicine” in the study field of Wildlife Sciences as in official documents with education classification code 45421 with the last three numbers (421) standing for Biology according to the classification of Latvian education which can be accessed here: https://likumi.lv/ta/id/291524-noteikumi-par-latvijas-izglitibas-klasifikaciju.
No professional qualification is awarded after graduating as it is an academic Master's study program. According to the SAR p. 73, the study program aims to prepare graduates who are competent in biomedical guidelines and topical issues, can apply principles of natural sciences, including technologies in clinical medicine, can use modern scientific and technological achievements in planning research in biomedicine and can carry out and manage such research, as well as to prepare graduates not only for modern scientific activities but also to respect the labour market needs of the biomedical industry in Latvia.
The study program is implemented in Latvian.
The requirements for enrolment in the study program: a Bachelor's degree or the second level of professional higher education in Wildlife Sciences, Health Care, Veterinary Medicine, and Pharmacy; prospective students must pass the test in natural sciences: chemistry and biology.

It has been stated in the SAR on page 74 that after successful completion of the studies, students are awarded a Master’s Degree in Natural Sciences in Biomedicine.
However, there is a discrepancy between the current classification legally accepted in the Republic of Latvia, Biology as the study program, and the Biomedicine study program "Biomedicine" currently implemented by RSU (SAR, p. 78). Importantly, RSU has already applied all necessary documents to change the register of study programs accordingly.
According to the SAR p. 74, the study program is implemented full-time with 80 CP to be gathered during the study process of 2 years. In the opinion of the experts, the title, code, degree to be obtained from the study program, aims, objectives, learning outcomes, and admission requirements are interrelated. The duration and scope of the study program implementation and the implementation language are reasonable and justified.

2.1.3. RSU has established the procedure for the development and internal approval of study programs, supervision of their operation, and periodical inspection (SAR p. 28). The necessity, usefulness, and compliance of a new study program to the set aims are evaluated by the Centre for Educational Growth and the Vice-Rector for Studies. The licensing documents of the developed study program, accreditation documents, and documents for implementing changes are coordinated by several RSU structural units and collegial institutions, including the Study Quality Council, Faculty Council, Dean’s Council, Rectorate, and Senate. The director of the study program ensures supervision over the implementation of a study program and its quality by evaluating the study process and learning outcomes, analysing the results of student surveys, changes to the trends in the labour market, and current events in the sector and world.

Academic Master's study program "Biomedicine" was successfully reaccredited in 2013. In 2018, the degree to be awarded was changed from a Master's degree in Biology (Mg. biol.) to a Master's degree in biomedicine (Mg. Biomed.). The name of the degree was changed by decision No 91-A, 04.09.2018, of the Study Accreditation Commission of the Academic Information Centre (AIC).

No other significant changes in the study program parameters were made in the reporting period. However, the study program courses look modernised, and their implementation has been improved to achieve the study program outcomes more effectively. During the reporting period, no noticeable changes in the number and impairment of the quality of the teaching staff have been observed (SAR, pp. 94-95). Moreover, the team of experts observed gradual improvement in the scientific achievements of the teaching staff.

2.1.4. Biomedicine and medical technology, pharmacy, and biotechnology disciplines have been recognized as a smart specialisation area strategy (Research and Innovation Strategy for Smart Specialization – RIS3). The country has joined the European Commission's S3 platform since 2014 to develop research and innovation in the following thematic areas: (1) personalised medicine, (2) translational medicine, and (3) infectious diseases/antimicrobial resistance/global health. This shows that the biomedical industry plays a vital role in the national economy of Latvia (SAR, pp. 80-81). By its content, the academic master study program "Biomedicine" has been developed in such a way that its graduates have extensive and various job opportunities not only in various Latvian scientific institutes and laboratories, including structural units of higher education institutions, where biomedical research is carried out but also in the pharmaceutical industry, clinical diagnostic laboratories, etc. Graduates of "Biomedicine" are a valuable contribution to the Latvian biomedical industry's labour market. However, the academic bachelor study program is still missing.
Eighty-three percent of the surveyed "Biomedicine" graduates in 2017-2021 have replied that the overall quality of the study program is "very good" (SER Annex 21.2). Interestingly, a report prepared on the study commissioned by RSU, "Investigation of the Competitiveness of Rīga Stradiņš University and RSU Red Cross Medical College Study Programs and Compliance with Medium- and Long-Term Development Trends of the Labour Market and Industry," in 2019-2020 showed that employers emphasize theoretical preparation of the students in Life Science field as good, with mainly lacking practical skills because each lab has its work specificity. These results have been taken into account by increasing the mastering of practical skills in practical classes of the study program. The number of students enrolled in the academic master study program "Biomedicine" tends to rise (SAR, p. 82). Admission to "Biomedicine" takes place in spring every other year. The study program started with ten budget-funded places provided, but not all of them were demanded because of the insufficient number of students. However, when the degree to be acquired was changed (to Master in Biomedicine) in 2018, the interest in applying for "Biomedicine" increased. The number of budget-funded places was reduced to six, though. All budget-funded places are filled, and paid study places are used. The tuition fee is relatively high for Latvia and not sufficiently supported by the state; therefore, the number of students who can pay is relatively small (three students in the academic year 2021/2022 and two students in the academic year 2022/2023). However, there are hopes for higher involvement of the biomedical industry to support biomedicine students. This industry requires researchers in different biomedical fields. The importance and reputation of the biomedical sector in the country have increased in line with the reputation of RSU and its academic master study program "Biomedicine".

2.1.5. Not applicable.

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

Conclusions:
All indicators and parameters of the study program comply with the existing preconditions of implementing "Biomedicine". The study program "Biomedicine" complies with the study field indicators, conditions, and criteria. In the opinion of the experts, the title, code, degree to be obtained from the graduation of the study program, its aims, goals, learning outcomes, and admission requirements are interrelated. The only discrepancy observed during the assessment of the study field and the program is associated with the transition of the qualification "Biology" to "Biomedicine", which is on the way to solved to correspond all the state requirements (https://likumi.lv/ta/id/291524-noteikumi-par-latvijas-izglitibas-klasifikaciju). The duration and scope of the study program implementation and the implementation language are reasonable and justified. The study program is implemented in Latvian. The goals, objectives, and learning outcomes are in line with compliance. The program is in demand, and there is a flow of incoming students every study year. The quality of studies, including the quality of the teaching staff, is high. The conditions of laboratories and the general study environment are excellent. The program is expensive and not sufficiently supported by the state; however, it is of high importance to the biomedical sector of Latvia, which raises hopes that the state will support it more.

Strengths:
1) The high economic and scientific importance of the qualification of “Biomedicine” for the state’s biomedical, pharmaceutical and veterinary sectors. The high economic and scientific importance of the qualification of “Biomedicine” for the state’s biomedical, medical, pharmaceutical, and veterinary sectors;
2) Excellent study conditions and high-quality teaching staff members;
3) High national and international reputation of RSU;
4) Rising popularity and the importance of the Wildlife Sciences field worldwide.

Weaknesses:
1) Expensive at the national scale and not sufficiently supported by the state;
2) Current problems with the legal change of the degree in Biology to Biomedicine, which may take time and increase uncertainty;
3)Lack of study opportunities for international students;
4) Lack of supporting bachelor's programs.

2.2. The Content of Studies and Implementation Thereof

Analysis

2.2.1. The goal of the study program Academic Master in Biomedicine (45421) is to achieve the sufficient level of knowledge and practical skills so that students can demonstrate extensive knowledge of various areas of biomedicine, including the latest scientific advances and the development and application of biomedical technologies; prove their ability to discuss current issues in the fields of biomedicine in a reasoned manner and able to propose innovative solutions for both scientific activity and entrepreneurship; they can carry out biomedical research both independently and as part of a research team and to take responsibility for the results obtained; they can offer high-quality solutions to unpredicted research problems in relevant areas of biomedical research; the students can integrate knowledge from different biomedical fields and contribute creatively to

the advancement of knowledge in both theoretical and practical (methods) aspect, while respecting the ethical principles of research; and can deal with business activities in the field of biomedicine, including organising and leading a team (e.g., staff of a biomedical laboratory) and using innovative approaches to achieve their goals, using modern technologies in biomedicine (SAR, p. 83).
The study program offers the broadest and diverse knowledge basis in the field of biomedicine, covering its most important theoretical and practical aspects. The structure, course offer, and content of the study program have been created by following the current trends in the development characterizing the science of biomedicine and the current situation in the Latvian labour market, as well as in compliance with Cabinet ministers Regulation No. 240 of 13.05.2014 "Regulations on the state standard of the academic education," and other regulations by the Cabinet of Ministers of LR and RSU.
The program Academic Master in Biomedicine (45421) has been created to fit all modern aspects of biomedical science. However, it has also been purposefully focused on specific fields of science, which are more related to particular sectors of the biomedical industry in Latvia, such as research in molecular genetics, cell biology, manufacturing medicinal products, and work at clinical laboratories. Several RSU scientific institutes are involved in implementing "Biomedicine", which makes it possible for students to participate in scientific projects of international importance.

2.2.2. Although the Self-estimation Report mistakenly does not provide information about whether the Master's study program awards students with their Master's degree based on the student participation in scientific research and subsequent scientific findings (SAR, p. 85), the expert team could obtain information during assessment visit and meetings/discussions with the study field/program director, teaching staff members, researchers, students, and alums. Scientific achievements and findings are significant in evaluating students' knowledge, skills, and the quality of their coursework and final theses. This approach stems from the traditions established in RSU as one of the leading research universities in Latvia in general and the top university in the field of biomedical research and studies.

2.2.3. The course within the academic master study program "Biomedicine" may vary from more theory-based courses, such as "Research Ethics," and lab-based courses, such as "Biochemistry," where experimental work is carried out during practical classes. The study courses in the Biomedicine program are often implemented using a personalised (individual-based) approach when students have the potential to express their creativity, which adds to the value of their knowledge (SAR, pp. 86-87).
A student-centred approach fosters this. Much attention is paid to the independent work of students, which focuses not only on research literature studies but also on the acquisition, analysis, and conclusions of research material data. Students also learn independently and responsibly while developing knowledge by interacting with each other and working with lecturers. Independent work can vary from course to course. For example, laboratory courses involve conducting laboratory protocols with data processing, obtaining results, and drawing conclusions. Thus, the academic master study program "Biomedicine" is highly student-centred and oriented toward each student's personality.

2.2.4. Almost all students of academic master study program "Biomedicine" work in biomedical, medical, veterinary, or environmental control labs and institutes, which suggests they have chances to pass their internships while performing duties at their official positions in their biomedicine-associated private or state-owned companies.

2.2.5. Not applicable.

2.2.6. According to the SAR pp. 87-88, the formulation of the topic of each Master's thesis and the further elaboration of the subject of the idea take place in close cooperation between the author of the Master's thesis and the supervisor. In addition, gradual in-depth mastering of the topic and research during the development of the final version of the Master's thesis is often observed. Most of the Master's theses are directly dedicated to modern problems of contemporary biomedicine. Students are also offered a wider choice of Master's thesis topics, as they can use and engage in research directions, which are practised not only in RSU's departments but also in different research institutes of RSU. In the case when the students' scientific interests exceed those reachable under the supervision of the RSU teaching staff, the Master's thesis can also be drafted in another university, such as Rīga Technical, the University of Latvia, or the BIOR Institute, which represents the biomedical industry - one of the leading institutes in the field of various biomedical research in Latvia. Importantly, all the Masters' theses drafted during the reporting period received an assessment from the Master's Thesis Assessment Commission (based on the RSU Regulations on the Development and Defence of a Master's Thesis" No. 2-1/9/2020, 10.11.2020) received the mark "eight" (out of ten) or higher. (SAR, Annex 22). All topics of Master's theses are scientifically relevant and traditionally supervised by nationally or internationally recognized researchers.

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

Conclusions:
This academic master study program "Biomedicine" is highly focused on expanding the biomedicine students' general knowledge, theoretical background, and professional skills. The study and course content compliance with national regulations is clearly demonstrated in SAR. The range of the study courses is interconnected and corresponds to the main goals of the study program "Biomedicine." The study implementation methods, including e-learning, work effectively for archiving the proposed aims and objectives of the study process. Internships are intrinsically embedded in the study outcomes and the process of studies. Student final theses demonstrated relevance to the study field and study program. The learning process is based on the individual approach to each student's needs whenever possible because the groups are relatively small, and the quality and experience of the teaching staff are sufficiently high to excellent.

Strengths:
1) The study program is highly topical, and all courses within the program are in good interconnection, embracing the most essential sub-fields of biomedicine.
2) Excellent connections with research institutes of RSU, other institutions of similar professional and scientific profiles, and the industry.
3) The social environment is excellent, and relationships between students and academic staff are respectful.
4) The small number of students makes it possible to use an individual-based approach in teaching and evaluating the quality of each student's achievements.
5) The study program "Biomedicine" is an essential field with the potential to enhance its role and the role of RSU in the Latvian economy and science.

Weaknesses:
1)The study program is expensive. Although this does not cause problems to the study process in

general, the resources available cannot cover all the needs of student scientific work. However, this problem is not unique to RSU.

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

This is a study program required for Latvian economics and science. The academic master study program "Biomedicine" is taught by nationally and internationally recognized scientists and institutions. The quality of teaching is high.

2.3. Resources and Provision of the Study Programme

Analysis

2.3.1. Information about the resources and material and technical provision of the program, including the teaching staff, generally is common to all programs and is already presented in Section 1.3. of the report and in Section 2.3 of SAR - Resources and provision of the study field (p.35.-51.)
According to SAR (point 3.3.1. p.89.) for the implementation of courses of academic master study program "Biomedicine", students are provided with a comprehensive study process, using well-equipped auditoriums, modern laboratories, the RSU Library (information in Latvian, English) with a wide and modern provision of open access textbooks and scientific literature, extensive availability of computer hardware and the internet, including provision of RSU e-learning environment and student information system (SIS-3). The laboratories involved in the implementation of the courses are equipped with state-of-the-art, wide-spectrum hardware, equipment, computer simulation programs and other technologies. During the study process, including for drafting their Master's thesis, students may use not only the theoretical provision (departments) of RSU but also the laboratories of RSU scientific institutes:
RSU Faculty of Medicine with the following departments – Department of Morphology, Department of Human Physiology and Biochemistry, Department of Biology and Microbiology, Department of Physics and Department of Pathology;
RSU Faculty of Pharmacy, Department of Pharmacology RSU Faculty of Public Health and Social Welfare, Department of Public Health and Epidemiology; Department of Health Psychology and Pedagogy;
RSU Department of Occupational and Environmental Medicine, RSU Department of Clinical Skills and Medical Technologies
RSU Statistical Unit; RSU Department of Humanities; RSU Institute of the History of Medicine; RSU Faculty of Law; RSU Health Management Lecturer Group;
RSU scientific institutes: Institute of Anatomy and Anthropology, Institute of Microbiology and Virology, Institute of Oncology; Institute of Occupational Safety and Environmental Health.
For the implementation of academic master study program "Biomedicine", modern infrastructure is available that includes latest generation equipment and hardware that allow modern techniques to be used in practical classes and scientific research, for example, PowerLab, ADInstruments makes it possible to conduct a wide range of functional examinations; Exact Grunding, a very hard tissue grinding system and a variety of immunohistochemical methods, can be used; the transmission electron microscopy negative contrasting method and many other methods of are available (see the

websites of the RSU structural units mentioned above). Students have access to high-quality information technology, a wide range of computer programs. Thus, in general, the academic master study program "Biomedicine" provides an excellent material technical provision (resources) for the qualitative implementation of study program courses, and the provision of RSU scientific institutes is also available for the drafting of Master's theses.
While RSU institutes are mentioned as available during the study process, during the assessment visit experts were left an impression that it is only partly true due to difficulty attracting enough research funding - RSU institutes are mainly used for Master's theses.

2.3.2. Not applicable

2.3.3. According to SAR (point 3.3.3. p.90.) It is planned to finance academic master study program "Biomedicine" from the resources of private and legal persons, setting the tuition fee for the Latvian flow of 4700 euro. 12 students are expected to be enrolled in the Latvian flow in academic year 2023/2024. (academic master study program "Biomedicine" has public funding for 6 budget funded places and places for paid students). It is planned in the cost estimate of the study program that the number of students in the second year of studies will decrease to 9 students. Such a number of students per flow would be optimal to ensure a high-quality study process and to keep the program cost-effective.
The funding should be used for staff remuneration, attraction of visiting university lecturers, taxes, maintenance of IT infrastructure, purchase of equipment and devices and study visit costs. In addition to the direct costs of the implementation of lectures and classes, the study program must cover the infrastructure maintenance costs (facilities, IT solutions) and other RSU common resources used in the StP (Student Services, Library, organisation of the study process, grant for the Student Union and other support and administrative functions).
academic master study program "Biomedicine" is implemented by the RSU Faculty of Medicine, Statistics Unit, Department of Physics, Department of Human Physiology and Biochemistry, Department of Biology and Microbiology, Institute of Anatomy and Anthropology Department of Morphology, and Faculty of Pharmacy, Department of Pharmacology. Remuneration of the academic staff in the first year of study program is planned to be approximately 30 thousand EUR.
The student costs are divided into several parts: 51% academic staff, 2% department resources, 14% other direct expenditure, 4% fixed costs, 29% overheads.

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

Conclusions:
The study program provides all necessary resources and complies with the conditions for the implementation of the study program.

Strengths:
1)Great material and technical provision

Weaknesses:
1)The resources are sufficient for student scientific work required to finish programme - Master's theses, beyond that resources are limited and not available constantly

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 academic master study program "Biomedicine" provides all necessary resources and complies with the conditions for the implementation of the study programme.

2.4. Teaching Staff

Analysis

2.4.1. All teaching staff have qualification in accordance with the requirements of regulators acts as shown in SAR (Annex 24.7 and Annex 6.1). The qualifications are evaluated through open competitions for academic positions. The number of teaching staff is quite high (34). Of the 34 lecturers involved in the implementation of the study program, 29 lecturers are elected to academic positions and 7 of them are professors and 4 are associate professors. Of the 34 lecturers, 27 lecturers hold a doctoral degree. In addition, some of them also function as leading researchers. According to the teaching staff CV's, the academics are actively involved in research: publish scientific articles, participate in national and international conferences and carry out externally funded scientific projects. The teaching staff has an English proficiency at level B2 or higher. These qualifications guarantee the effective implementation of the master's study program and the achievement of study goals and tasks.

2.4.2. Of the 34 lecturers involved in the implementation of the academic master study program "Biomedicine", 33 lecturers are employed in the main job. They have the status of the elected lecturer and acting lecturer. Only one of them is invited (Annex 6.1) . The high percentage of lecturers elected to academic positions and having the academic position as the main job reduces the possibility of the changes in the composition of the teaching staff and ensures the quality of the implementation of the study program. The RSU offers opportunities for the professional development of teaching staff. In 2014, RSU Centre for Educational Growth was established to provide the opportunity for teaching staff to improve their skills in the fields of pedagogy and educational technology. In 2015, RSU started the project to improve the English language skills of RSU staff. RSU invests a considerable amount of its own funds into maintaining the remuneration and motivation system of the staff (Annex 1.5). All these measures taken by RSU ensure minor changes in the composition of the teaching staff.

2.4.3 .Not applicable.

2.4.4. Annex 6.4 of the SAR "List of high-ranking publications of academic staff according to the impact factor IF (2021) in academic master study program "Biomedicine" demonstrates that the teaching staff have been active in research in the last six years. 33 lecturers from 34 members of the teaching staff published two or more publications. Some of them were particularly productive (more than 25 papers for each in the last six years). The major part of publications is indexed in the internationally recognized data bases as Scopus and Web of Science. One of the lecturers has

practical experience as shown in the CV.

Criterion:
2.4.5. A mechanism for mutual cooperation of the teaching staff in the implementation of the study program has been established, it ensures the achievement of the aims of the study program and the interconnection of study courses within the study program.

Analysis:
2.4.5. According to the SAR p. 20, most issues related to the study process, such as developing/updating the content of the study program, cooperation with lecturers and students of study courses or the encouragement to students are carried out by the academic master study program "Biomedicine" Director. Study program Director cooperates with heads of RSU departments and heads of study courses, including lectures involved in the courses (SAR p. 20). It is not fully clear how the process of mutual cooperation of the teaching staff takes place. However, during the interview at the assessment visit the expert panel revealed the lack of discussions and the mutual cooperation of the teaching staff to ensure the interconnection of study courses within the study program. Successful teaching and learning of one study course should be based on the learning outcomes of previous courses. As an example, knowledge and skills in organic chemistry are necessary and particularly important for the achievements of biochemistry learning outcomes. To ensure the link between courses and the best teaching and learning achievements, the constant mutual cooperation of the teaching staff is essential and the attention has to be drawn to that process.

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

Conclusions:
The qualification of the teaching staff is good and in accordance with the state requirement. Teaching staff members are also active in research, have published intensively, and presented the results at conferences. The research subjects of the teaching staff fit very well with the academic master study program "Biomedicine" and are connected with teaching activities.
The high percentage of lecturers elected to academic positions and having the academic position as the main job reduces the possibility of changes in the composition of the teaching staff.
To ensure the achievement of the objectives of the study program and the interconnection of study courses within the study program, the mutual cooperation of the teaching staff should be improved.

Strengths:
1) Qualified teaching staff, who also are involved in research.
2) Good knowledge of foreign languages.

Weaknesses:
1) Some signs of the lack of mutual cooperation of the 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 qualification of the teaching staff is good and in accordance with the state requirement. Teaching staff members are also active in research. The research subjects of the teaching staff fit very well with the study programme and are connected with teaching activities. However, to ensure the achievement of the objectives of the study programme and the interconnection of study courses within the study programme, the mutual cooperation of the teaching staff should be improved.

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: Partially compliant

Provided annex " 17.1_ pielik_ Atbilstiba_valsts_izgl_stand_AMSP_Biomedicina_lv.pdf" affirms that "academic master study program "Biomedicine"
" programme complies with the Cabinet of Ministers Regulation No. 240 "Regulations on the State Standard of Academic Education" but its have caused complications for the awarding of master's degrees in Biomedicine and Biostatistics, but additionally, the degree awarded may correspond to international practice for the title.
If a student has not studied the requirements set out in the Environmental Protection Law and the Civil Protection Law in a study of a lower level, the professional Master's study programme it is intended to include mastering of study courses "Civil and Environmental Protection, First Aid" (2 CP / 3 ECTS).

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

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

Annex 20.1_pielik_Studiju kursu apraksti_StP Biomedicina.pdf on Study course descriptions, as well as the study materials have been prepared according to requirements set forth in Section 561 , Paragraph two and Section 562 , Paragraph two of the Law on Higher Education

Institutions.

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: Partially compliant

Annex 24.1_pielik_Diploma_un_pielikuma_paraugs_Biomedicina_lv.pdf. consisting of sample of the diploma and its supplement to be issued for completing the study programme are made according to Regulations of the Cabinet of Ministers No. 202 except for the page 1 of the sample where coat of arms of the Republic of Latvia is missing.

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

Annex 24.7. pielik_AMSP Biomedicina docetaju sastava analize.pdf contains an analysis that the academic staff of the academic study programme complies with the requirements specified in Section 55, Paragraph one, Clause 3 of the Law on Higher Education Institutions.

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

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

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

Annexes 6.1_pielik_Studiju programmas istenosana iesaistito macibspeku saraksts_apvienots.pdf.;6.2_pielik_Docetaju_CV_Abam_StP_lv.pdf.; and 24.4._Apliecinajums par macibspeku valsts valodas atbilstibu.pdf., state and analyze the teaching staff members that are involved in the implementation of the study programme and they 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.

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: Not relevant

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

Annex 24.8_pielik_Studiju liguma paraugs.pdf consisting of a standart sample of study agreement (contract) is made in accordance with the mandatory provisions stated in Regulations of the Cabinet of Ministers No. 70.

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

Annex 24.2_pielik_Apliecinajums par studiju turpinasanas iespeju.pdf states that the RSU will provide students with opportunities to continue their education in another study programme “Biostatistics” as students of the Master's study programme “Biomedicine” do not have an equivalent programme to continue their studies in Latvia.

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

Annex 24.3_Zaudejumu_komens_abam_StP.pdf on compensation of losses to the students contains a signed confirmation from HEI's rector that students are guaranteed compensation for losses of academic Master’s study programme “Biomedicine”.

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: Partially compliant

The diploma sample where coat of arms of the Republic of Latvia is needed - is missing; HEI can only provide students with opportunities to continue their education in another study programme “Biostatistics” as students of the Master's study programme “Biomedicine” do not have an equivalent programme to continue their studies in Latvia and Regulations of the Cabinet of Ministers No. 240, titled "Regulations on the State Academic Education Standard," have caused complications for the awarding of master's degrees in Biomedicine and Biostatistics

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

The study program "Biomedicine" stands as a well-structured and robust educational offering that thoroughly complies with the existing preconditions and criteria set for its implementation. The indicators, conditions, and criteria associated with the study field align well with the program's objectives. The title, code, degree to be conferred, aims, goals, learning outcomes, and admission requirements are thoughtfully interconnected, ensuring a cohesive educational experience.
However, one noted issue during the evaluation pertains to the transition from the qualification "Biology" to "Biomedicine." While efforts are underway to resolve this discrepancy to meet state requirements, it remains a point of consideration. Notwithstanding this, the duration and scope of the program's implementation, as well as the utilization of the Latvian language for instruction, are reasonably justified. The program is further validated by its popularity and consistent influx of students year after year.
A strong suit of the program is its commitment to high-quality education, underscored by the caliber of its teaching staff and the excellent laboratory facilities and study environment. Moreover, the program is applauded for its ability to conform to national regulations, with well-interconnected courses that reflect its primary objectives. The use of e-learning and effective study methods, along with embedded internships, enhances the overall educational experience.
One area for potential enhancement is the need for increased collaboration and mutual support among the teaching staff to ensure the realization of program objectives and better interconnection of study courses. Despite the notable quality of the teaching staff, it's worth noting that a substantial percentage holds academic positions as their primary occupation, potentially limiting opportunities for staff composition changes.
Finally, the of the coat of arms of the Republic of Latvia in the diploma sample is missing and there is, complications in awarding master's degrees in both Biomedicine and Biostatistics. This situation arises due to regulatory complexities outlined in Regulations of the Cabinet of Ministers No. 240. Nonetheless, given the program's crucial role in Latvia's biomedical sector, there is hope that increased state support will be directed toward resolving these issues and further developing this field of study.

Strengths:
1. The academic staff is highly qualified and well-suited for the study program, ensuring compliance with legal requirements and regulations.
2. The teaching staff is qualified and actively engaged in research, bolstering the program's quality.
3. A good command of foreign languages among the teaching staff enhances the program's international appeal.
4. Great material and technical resources are available to support the program.
5. The study program is up to date, with well-integrated courses and strong connections to research institutes and industry.
6. The social environment is excellent, promoting respectful relationships between students and academic staff.
7. The small student population allows for an individualized teaching approach.

8. The program holds high economic and scientific importance for various sectors and enjoys a strong reputation, both nationally and internationally.

Weaknesses:
1. The absence of the coat of arms of the Republic of Latvia on the diploma sample and issues in the awarding of master's degrees, due to regulatory complexities (Regulations of the Cabinet of Ministers No. 240) pose challenges.
2. Some signs of inadequate cooperation among the teaching staff may impact the program's effectiveness.
3. While resources for student scientific work are sufficient, they are limited and not always readily available.
4. The program is expensive, limiting the resources available for student scientific work, although this is not unique to RSU.
5. There are current problems with changing the degree from Biology to Biomedicine, leading to uncertainty and potential delays.
6. Limited study opportunities for international students and a lack of supporting bachelor's programs impact program accessibility.

Evaluation of the study programme "Biomedicine"

Evaluation of the study programme:

Good

2.6. Recommendations for the Study Programme "Biomedicine"

Short-term recommendations

1) RSU and the Head of the Biomedicine study field and programme director must achieve full compliance between the degree of "Master of natural sciences in Biomedicine" implemented by RSU and the regulations of the Cabinet of Ministers of the Republic of Latvia.
2) The teaching staff should improve their mutual cooperation to ensure the interconnection of study courses.

Long-term recommendations

1) It would be important to open the Biomedicine Master's' programme to international students, which might help to decrease tuition fees;
2) Experts suggest establishing the Bachelor's study program in "Biomedicine" in the future.

II - "Biostatistics" ASSESSMENT

II - "Biostatistics" ASSESSMENT

2.1. Indicators Describing the Study Programme

Analysis

2.1.1. The academic Master’s study programme “Biostatistics” 45421, complies with the study field of “Wildlife Sciences”, which is a branch of science focusing on the scientific study of life. Biostatistics, as a subdiscipline, is an integral part of how biological data should be collected,

processed, analysed and presented. The connection to Wildlife Sciences is emphasised throughout the study programme, both with regard to the specific applications in the statistical courses and in that separate courses on biology are provided for students who have not previously studied biology and related subjects. The length of the implementation of the academic master's study programme "Biostatistics" 45421, which is 2 years, is evaluated as sufficient for acquiring the necessary skills and way of thinking to enter the labour market as a biostatistician, however there is a concern that the theoretical depth regarding statistical inference is lacking if the students want to pursue a PhD in biostatistics. Although stated in the Appendix 17.1 that is it possible to continue studies in doctoral study programmes related to mathematics or statistics, for example, the doctoral study programme "Mathematics" at the University of Latvia or the doctoral study programme "Mathematical Statistics" at the University of Tartu, or similar study programmes abroad other universities such as Uppsala University will be more restrictive.

2.1.2. The title of the academic master's study program "Biostatistics" in the study field of Wildlife Sciences with education classification code 45421 with the last three numbers (421) standing for Biology according to the classification of Latvian education which can be accessed here: https://likumi.lv/ta/id/291524-noteikumi-par-latvijas-izglitibas-klasifikaciju.
No professional qualification is awarded after graduating as it is an academic Master's study program. According to the Annex 17.1_ pielik_ AMSP_atbilstiba valsts izglitibas standartam_Biostatistika.pdf the academic master's study programme "Biostatistics" aims to prepare qualified biostatisticians for health-related sectors, providing them not only with in-depth knowledge of statistical data processing methods but also promoting understanding of causes and progress of most common diseases, process of epidemiological and clinical research, so that graduates of the study programme are able to independently plan and conduct research in health-related sectors, collect data and statistically process them, analyse the obtained results that would serve as basis to define conclusions resulting from the research.
The academic master's study programme "Biostatistics" will be implemented in English. Also, considering the background of the teachers involved it is clear from a practical perspective that it must be provided in English. In such cases, the requirement being a level of English knowledge that at least corresponds to B2 level.
The admission requirements of this academic master's study programme "Biostatistics" is a Bachelor's degree or the second-level professional higher education in the following subject area of education: Mathematics and Statistics, Biology, Programming, Medicine, Medical Services, Nursing Studies, Dentistry, Pharmacy, Public Health, Medical Physics. For studies in English, the level of English knowledge is at least B2 level OR Bachelor's degree or second level professional higher education (or equivalent higher education) in mathematics (or statistics), public health, biology, medicine or computer sciences. It is not clear which one is correct. This constitutes a very broad admission requirement, with less focus on a mathematical background while highlighting that students with subject matter knowledge in aforementioned subjects are considered an important resource.
After successful completion of the studies, students are awarded a Master's Degree in Natural Sciences in Biology.
However, there is a discrepancy between the current classification legally accepted in the Republic of Latvia, Biology as the academic master's study programme "Biostatistics", and the biostatistics study program "Biostatistics" currently implemented by RSU. Importantly, RSU has already applied all necessary documents to change the register of study programs accordingly.
The academic master's study programme "Biostatistics" is implemented full-time with 80 CP to be gathered during the study process of 2 years. In the opinion of the experts, the title, code, degree to be obtained from the study program, aims, objectives, learning outcomes, and admission

requirements are interrelated. The duration and scope of the academic master's study program "Biostatistics" implementation and the implementation language are reasonable and justified.

2.1.3. Based on SAR 3.1.1 no changes have been made since the program was licenced.

2.1.4. The academic master's study program "Biostatistics" corresponds to the RSU Development Strategy for 2022-2027 (see RSU website in Latvian and English). SAR (p. 103) states that the academic master's study programme "Biostatistics" has been developed based on the need and vision of the development of RSU.The implementation of the study program fosters the achievement of the tasks set in the National Development Plan of Latvia for 2014-2020: to ensure availability of higher education, implementation of the measures supporting export, promotion of competitiveness and consolidation, as well as drives the development of a knowledge-based society. The StP corresponds to strategic objectives and priorities of the first revision of the National Development Plan of Latvia for 2021-2027, in particular productivity and income, as well as knowledge and skills for personal and national growth.
There is an increased demand of biostatisticians in the labour market related to healthcare, both within governmental organisations, universities, NGOs and companies. The reason is that data production is constantly increasing. This is, for statisticians in general, indicated by the information of the State Employment Agency, there will be a slight increase in demand for specialists from the group of occupations 2120 (mathematicians, actuaries and statisticians) and 3314 (technicians and associate professionals in statistics, mathematics and related fields) in the near future. Thus, being the only master's programme in biostatistics in the Baltic states, the students graduating from the programme will fill a gap in the labour market (SAR, p. 106).
The number of students that started the academic master's study programme "Biostatistics" in fall 2023 was 14, which constitutes a good number of students when providing a master's programme for the first time. The cohort is large enough to create a sufficient critical mass of students to make the programme economically and academically viable, yet not too large to manage when considering the resources when starting a new programme. It should also be mentioned that it is often difficult to attract students to statistics programmes.
Still, no students have graduated yet and therefore no employment indicators can be provided. Therefore, we can thus far only rely on the previously mentioned predictions.

2.1.5. Not applicable

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

Conclusions:
All indicators and parameters of the academic master's study program "Biostatistics" comply with the existing preconditions of implementing "Biostatistics". In the opinion of the experts, the title, code, degree to be obtained from the graduation of the academic master's study program "Biostatistics", its aims, goals, learning outcomes, and admission requirements are interrelated. The only issue is related to the degree provided, i.e. biology and not biostatistics. The duration and scope of the academic master's study program "Biostatistics" implementation are reasonable and justified. However, providing the program in English is not a drawback as biostatistics is inherently international. The goals, objectives, and learning outcomes are in line with compliance. The

academic master's study program "Biostatistics" is in demand.

Strengths:
1) Implementing a academic master's study program "Biostatistics" can be justified from a social and economical perspective as there is a rising demand in data analysis in Wildlife Sciences. This follows an international trend with a greater need for so called "data scientists".
2) The number of students looks promising.

Weaknesses:
1) The admission requirement is diverse, which is potentially an issue as this may hinder students from taking more theoretical courses in the program.

2.2. The Content of Studies and Implementation Thereof

Analysis

2.2.1. The task of the academic master's study program "Biostatistics" is to gradually develop the knowledge, skills, and competences of students in biostatistics over four (or five for part-time studies) semesters. In order to ensure the learning of the content of the study program, along with knowledge transfer and skills development, equal consideration was given to the format of teaching and delivery of the courses and their interconnection. The statement in Annex 17.1_ pielik_ AMSP_atbilstiba valsts izglitibas standartam_Biostatistika.pdf assures that the learning outcomes to be mastered in study courses correspond to the knowledge, skills and competence of level 7 specified in the Latvian Education
SAR (p. 109-112) and Annex 19 show that many of the courses are topical and in the first semester, due to the diversity of the students with different previous education, two blocks of study courses are distinguished: medical study courses and mathematical study courses aimed at equalising students' initial knowledge so that the program material can be successfully mastered depending on if the student has a mathematical or medical/biological background. Also, the inclusion of biological/medical courses is beneficial in that it helps with the communication aspect of the future biostatistician.
After the first semester applied courses are given that complies with current trends in the development of the modern biostatistics, such as causal inference, machine learning method, as well as a thorough introduction to more traditional biostatistical courses such as clinical trials and classical statistical models. An important part of being a biostatistician is statistical consultancy, which is given as a course in the third semester. The final semester of the program is devoted to finishing the master graduation paper. Overall, the choice of courses meets the need from the labour market and the program fits well into what can be expected from a biostatistician and the SAR (p. 107) also reflects on that the program meets the needs of the industry, labour market. And as mentioned, some courses in the program also follow the latest scientific trend (such as causal inference and machine learning).
As shown in Annex 17.1_ pielik_ AMSP_atbilstiba valsts izglitibas standartam_Biostatistika.pdf the program complies with national state regulations.
A concern is that the program lacks theoretical statistical courses, or at least the possibility of taking such courses. This is a potential risk if a student is interested in pursuing a PhD in biostatistics where the student in some cases internationally will not be eligible.
Another concern is that the academic master's study program "Biostatistics" actually contains too much material and contents. Although a different program, during the panel interview, alumni

commented that biomedicine is a little bit cramped. Similarly, the biostatistics program contains many courses (at least in comparison to the master program in biostatistics at Karolinska Institute, Sweden) and the courses are in general short (2CP/3ECTS). There is a risk due to this that the program to a student becomes fragmented, and although the future student and future biostatistician will have encountered many statistical concepts and methods, this could be at the cost of deeper understanding.

2.2.2.
The courses in the program contain theoretical and practical modules that allow for the students to acquire knowledge so that the students are able to apply the knowledge in practical settings and also understand why. In the course descriptions practical sessions and working with data is described (SAR, 109-112). There is also a research component in the academic master's study program "Biostatistics" in that data analysis is an essential part of the coursework in the applied statistical courses.
To highlight the connection to research the two compulsory courses, Clinical Research I and Clinical Research II, are especially relevant. These two courses focus on key aspects of clinical trials used in research and topics covered are key elements of clinical trials, planning and analysis of clinical, safety aspects and efficacy of clinical trials and ethical statistical guideline (SAR, p. 109-110).
Then writing the thesis students can choose the topic of their own or choose from a range of topics offered to them by the Statistics Unit, in cooperation with potential placement institutions that can provide students with research data for drafting their Master's thesis.
Furthermore, as mentioned in SAR (p. 114), the study courses have students-centred learning with project-based, simulation-based, and problem-based learning. This contributes to understanding, critical thinking, problem-solving skills, and ability to contribute to the relevant field of science.
However, there is one important caveat that the experts want to emphasise and that is the lack of deeper theoretical courses in statistics. Thus, although a student will be able to work in a clinical research setting, the lack of theoretical courses constitutes a hindrance to methodological development of statistical tools, which is a part of statistical research.

2.2.3. One of the operational principles of interdisciplinary nature of the academic master's study program "Biostatistics" is its flexible structure, competence approach and method of teaching (project work, simulation classes, debates, research, digitalisation solutions for e-learning, both in classes and in independent work). The attraction of visiting lecturers from other European and US universities, as well as the involvement of representatives of the pharmaceutical industry, is widely ensured.
From SAR (p. 114) it is mentioned that the method of teaching will consist of partly project work, simulation classes, debates, research, e-learning. Together with the panel interview with teaching staff this suggests that students-centred learning and teaching principles are going to be considered. Theoretical development is connected to practical work and students will according to SAR (p. 114) encounter project-based, simulation-based, and problem-based learning to enhance their understanding.
A current risk of the academic master's study program "Biostatistics" is that too many teachers are from outside Latvia. It is understandable since the masters program is implemented for the first time, and there is a lack of at RSU with a PhD in biostatistics/statistics. However, in the long run the program should have more teachers at RSU to ensure the sustainability of the program and also enable communication between teachers at different courses to ensure interconnectivity throughout the program.

2.2.4. Internship is planned in the academic master’s study program “Biostatistics”, thus giving students the opportunity to strengthen the theoretical knowledge acquired in the program and the applicability of this knowledge in practice. The student can undergo the placement in the 3rd semester in pharmaceutical companies, CRO organisations or research institutions that are active in research and that could provide students with a data masse for writing their Master's thesis. It is not stated how this should be managed in a foreign language for foreign students.
As mentioned in SAR (p. 117-118) the aim of the placement is to deepen students' theoretical knowledge and at the same time applying the theory in practice. Linking the skills acquired in study courses with practical situations is an important learning outcome in a statistics program.
The internship complies with the requirements of the regulatory enactments (Annex 9).

2.2.5.
Not applicable.

2.2.6.
Not applicable since no students have yet finished a final thesis.

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

Conclusions:
The academic master’s study programm“Biostatistics” provides the biostatistics students' with a broad biostatistical overview, complemented with either biological/medical knowledge or mathematical/statistical knowledge. The program fits well into the needs of the labour markets’ need and has a content that complies with national regulations. The range of the study courses is interconnected and corresponds to the main goals of the academic master’s study program “Biostatistics”. The study implementation methods work effectively for archiving the proposed aims and objectives of the study process. Internships are provided in the program.

Strengths:
1) The study program covers a broad spectrum of modern and traditional biostatistics.
2) The small number of students makes it possible to use an individual-based approach in teaching and evaluating the quality of each student's achievements.

Weaknesses:
1) Sustainability in terms of having few teachers at RSU.
2) Lack of theoretical courses.

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 is required for Latvian economics and science. The academic master study program "Biostatistics" has a content that allows for the students to apply there in research related areas and other fields

2.3. Resources and Provision of the Study Programme

Analysis

2.3.1. Information about the resources and material and technical provision of the program, including the teaching staff, generally is common to all programs and is already presented in Section 1.3. of the report and in Section 2.3 of SAR - Resources and provision of the study field (p.35.-51.)
According to SAR (point 3.3.1. p.119.) In the process of planning and development of the study program, particular attention was paid to the analysis and provision of the study base needed to implement the StP. Such an approach identified elements of the study base necessary for the full implementation of the study program, which are fully provided by RSU. The key elements are listed in SAR under point 3.3.1. (p.119.-120.) and mostly overlap with section 1.3. of the report, but the following 2 are unique to academic master's study program "Biostatistics":
1. For teaching the academic master's study program "Biostatistics" practical classes, there are three specially equipped computer classes at FMSL's disposal with 44 powerful computers and installed statistical software required for the StP such as R, R Studio, SAS, IBM SPSS Statistics, STATA;
2. Cooperation of RSU academic units, mainly in the implementation of study courses of the thematic block of medicine of semester 1, in the implementation of the study courses "Human Anatomy and Physiology", "Internal and Infectious Diseases" and "Biochemistry and Laboratory Diagnostics" with departments of RSU Faculty of Medicine, as well as cooperation with RSU Language Centre in compulsory mastering of the Latvian language for international students in semester 3.

2.3.2.
Not applicable

Analysis:
2.3.3. According to SAR (point 3.3.1. p.119.) it is planned to finance the study program from the resources of private and legal persons, setting the tuition fee for the Latvian flow of 2700 euro, but for the English flow – 3700 euro per year. 12 students are planned to be enrolled to the Latvian or English flow in the academic year 2022/2023. It is planned in the cost estimate of the study program that the number of students in the second year of studies remains the same. Such a number of students per flow would be optimal to ensure a high quality study process and to keep the program cost-effective.
The funding should be used for staff remuneration, attraction of visiting university lecturers, taxes, maintenance of IT infrastructure, purchase of equipment and devices and study visit costs. In addition to the direct costs of the implementation of lectures and classes, the study program must cover the infrastructure maintenance costs (facilities, IT solutions) and other RSU common resources used in the study program (Student Services, Library, organisation of the study process, grant for the Student Union and other support and administrative functions).
Remuneration of the academic staff in the first year of the study program is planned to be approximately 10 thousand EUR in the Latvian flow and approximately 12 thousand euro in the English flow.
The student costs in the Latvian flow are divided into several parts: 47% academic staff, 3% department resources, 18% other direct expenditure, 6% fixed costs, 26% overheads.
The student costs in the English flow are divided into several parts: 50% academic staff, 2% department resources, 17% other direct expenditure, 5% fixed costs, 26% overheads.

During the assessment visit the challenge to attract a sufficient number of students was mentioned several times during the interviews. That is why the academic master's study program "Biostatistics" is available only once every 2 years.

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

Conclusions:
The academic master's study program "Biostatistics" provides all necessary resources and complies with the conditions for the implementation of the study program.
Attracting students to this program is clearly a challenge but the reasons are most likely external and not specific to RSU.

Strengths:
1) Potentially available material and technical provision exceeds the requirements

Weaknesses:
1) Difficulty attracting 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

The academic master's study program "Biostatistics"provides all necessary resources and complies with the conditions for the implementation of the study program. The difficulty of attracting students was already identified as a potential risk and is sufficiently taken into account.

2.4. Teaching Staff

Analysis

2.4.1. All teaching staff have qualification in accordance with the requirements of regulators acts as shown in SAR (Annex 24.7 and Annex 6.1). The qualifications are evaluated through open competitions for academic positions. The number of teaching staff is quite high (25). Of the 25 lecturers involved in the implementation of the academic master's study program "Biostatistics", 12 lecturers are elected to academic positions and 1 of them are professors and 4 are associate professors. Of the 25 lecturers, 18 hold a doctoral degree. In addition, some of them also function as leading researchers. According to the teaching staff CV's, the academics are actively involved in research: publish scientific articles, participate in national and international conferences and carry out externally funded scientific projects. The teaching staff has English proficiency at B2 level or higher. These qualifications guarantee the effective implementation of the academic master's study program "Biostatistics" and the achievement of study goals and tasks.

2.4.2. Of 25 lecturers involved in the implementation of the academic master's study program

“Biostatistics”, 12 lecturers are employed in the main job. They have the status of the elected lecturer. In 2023, RSU attracted a lecturer to the position of associate professor to ensure the correspondence to Section 55, Paragraph one, Clause 3 of the Law on Higher Education Institutions (Annex 6.1). However, 13 lecturers are invited. (Annex 24.7). In future, a high percentage of invited lecturers not employed in the main job could negatively affect the quality of the implementation of the academic master’s study program “Biostatistics” and cause changes in the composition of the teaching staff.

2.4.3. Not applicable

2.4.4. Annex 6.4 of the SAR “List of high-ranking publications of academic staff according to the impact factor IF (2021) in academic master’s study program “Biostatistics” and the CV of teaching staff show that teaching staff members have been active in research in the last six years. The number of publications has a tendency to increase. All elected lecturers published at least one paper in peer-reviewed editions. Some of them were particularly productive (more than 25 papers for each in the last six years). The major part of publications is indexed in the internationally recognized data bases as Scopus and Web of Science. Invited lecturers have published scientific articles in peer-reviewed editions, including international editions or have five years of practical experience.

2.4.5. According to the SAR p. 20, most issues related to the study process, such as developing/updating the content of the study program, cooperation with lecturers and students of study courses or the encouragement to students are carried out by the academic master’s study program “Biostatistics” Director. Study program Director cooperates with heads of RSU departments and heads of study courses, including lectures involved in the courses (SAR p. 20). It is not fully clear how the process of mutual cooperation of the teaching staff takes place. However, no lack of discussions or no lack of the mutual cooperation of the teaching staff was not revealed during the interview in the assessment visit of the experts.

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

Conclusions:
The qualification of the teaching staff is good and in accordance with the state requirement. Teaching staff members are also active in research, have published intensively, and presented the results at conferences. The research subjects of the teaching staff fit very well with the academic master’s study program “Biostatistics” and are connected with teaching activities.
The high percentage of lecturers not employed in the main job could negatively affect the quality of the implementation of the academic master’s study program “Biostatistics”.

Strengths:
1) Highly qualified teaching staff, who also are active in research and publish intensively.
2) Good knowledge of foreign languages.

Weaknesses:
1) The high percentage of lecturers not employed at RSU as their main job.

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 qualification of the teaching staff is good and in accordance with the state requirement. Teaching staff members are also active in research. The research subjects of the teaching staff fit very well with the academic master's study program "Biostatistics" and are connected with teaching activities. However, the percentage of lecturers not employed at RSU as their main job is high.

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: Partially compliant

Provided annex " 17.1_ pielik_ AMSP_atbilstiba valsts izglitibas standartam_Biostatistika.pdf" affirms that "academic master's study programme "Biostatistics"
" programme complies with the Cabinet of Ministers Regulation No. 240 "Regulations on the State Standard of Academic Education" but its have caused complications for the awarding of master's degrees in Biomedicine and Biostatistics, but additionally, the degree awarded may correspond to international practice for the title.
If a student has not studied the requirements set out in the Environmental Protection Law and the Civil Protection Law in a study programme of a lower level, the programme elective course "Civil and Environmental Protection, First Aid" of 2 credit points / 3 ECTS is planned.

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

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

Annex 20.1_21.3_pielik_St_kursu_apraksti_AMSP_Biostatistika_tsk_Talmacibai_lv.pdf on Study course descriptions in Biomedicine as well as the study materials have been prepared according to requirements set forth in Section 561 , Paragraph two and Section 562 , Paragraph two of the Law on Higher Education Institutions, in Latvian and English.

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: Partially compliant

Annex 24.1_pielik_Diploms_Pielikums_Biostatistika_2023_lv.pdf consisting of sample of the diploma and its supplement to be issued for completing the study programme are made according to Regulations of the Cabinet of Ministers No. 202 except for the page 1 of the sample where coat of arms of the Republic of Latvia is missing.

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

Annex 24.7. pielik_AMSP Biomedicina docetaju sastava analize.pdf contains an analysis that the academic staff of the academic study programme complies with the requirements specified in Section 55, Paragraph one, Clause 3 of the Law on Higher Education Institutions.

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

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

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

Annexes 6.1_pielik_Studiju programmas istenosana iesaistito macibspeku saraksts_apvienots.pdf.;6.2_pielik_Docetaju_CV_Abam_StP_lv.pdf.; and 24.4._Apliecinajums par macibspeku valsts valodas atbilstibu.pdf., state and analyze the teaching staff members that are involved in the implementation of the study programme and they 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.

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

Annex 24.5_pielik_Apliecin_docetaju_anglu_valoda_AMSP_Biostatistika_lv.pdf states that the respective foreign language skills of the teaching staff involved in the implementation of the

study programme are at least at B2 level according to the European Language Proficiency Assessment levels.

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

Annex 24.8_pielik_Studiju liguma paraugs.pdf consisting of a standart sample of study agreement (contract) is made in accordance with the mandatory provisions stated in Regulations of the Cabinet of Ministers No. 70.

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: Partially compliant

Annex 24.2. states that the RSU will provide students with opportunities to continue their education in another study programme at the University of Latvia to continue their studies in the Master's study programme “Mathematics” (45460), although it does not entail the same exact study programme (47460).

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

Annex 24.3_Zaudejumu_komens_abam_StP.pdf on compensation of losses to the students contains a signed confirmation from HEI's rector that students are guaranteed compensation for losses of academic Master’s study programme “Biostatistics".

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: Partially compliant

The diploma sample where coat of arms of the Republic of Latvia is needed - is missing; HEI can only provide students with opportunities to continue their education in another study programme “Mathematics” as students of the Master's study programme “Biostatistics” do not have another programme to continue their studies in Latvia and Regulations of the Cabinet of

Ministers No. 240, titled "Regulations on the State Academic Education Standard," have caused complications for the awarding of master's degrees in Biomedicine and Biostatistics.

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

The academic master's study program "Biostatistics" demonstrates a well-structured and comprehensive approach that adheres to the necessary prerequisites for its implementation. Experts have evaluated the program's title, objectives, goals, learning outcomes, and admission requirements, and they find them to be closely interrelated, ensuring coherence in the program's design. However, one notable concern is the degree granted upon graduation, which is in the field of biology rather than biostatistics, potentially causing some confusion for students.

This program effectively blends biostatistics with either biological/medical knowledge or mathematical/statistical knowledge, catering to the diverse needs of students and aligning with labour market demands. The range of study courses is carefully interconnected, serving the primary goals of the academic master's study program "Biostatistics." Moreover, the incorporation of internships enriches the educational experience and prepares students for practical applications in various fields. It's evident that this program is highly sought after, contributing significantly to the fields of Latvian economics and science.

Attracting students to the program is admittedly a challenge, although the root causes of this issue appear to be external and not specific to the institution offering the program. The program boasts a qualified teaching staff who actively engage in research, and their research topics are closely aligned with the academic master's study program "Biostatistics," reinforcing the program's academic integrity. Nevertheless, it's worth noting that a considerable percentage of lecturers are not employed full-time at the university.

While some issues with compliance to the State Academic Education Standard have been identified, the program overall aligns with the legal requirements outlined in the Law of Higher Education Institutions and other regulatory enactments. This ensures that students receive education that is not only valuable but also in accordance with the established norms and standards.

In summary, the academic master's study program "Biostatistics" is a well-conceived and coherent educational initiative, offering a range of subject matter expertise and practical experience. While challenges exist in terms of student enrolment and some aspects of compliance, it remains a valuable resource for students seeking to develop expertise in biostatistics and related fields.

Strengths:

1. Justification for the academic master’s study program "Biostatistics" is strong, as it aligns with the rising demand for data analysis in Wildlife Sciences, in line with the international trend of needing "data scientists."
2. The program has a promising number of students.
3. The curriculum covers a broad spectrum of modern and traditional biostatistics.
4. The small student population allows for an individual-based teaching approach.
5. Adequate material and technical provisions are in place.

Weaknesses:

1. Diverse admission requirements may hinder students from taking more theoretical courses.
2. The program faces challenges in sustaining a sufficient number of teaching staff.
3. There is a lack of theoretical courses in the curriculum.
4. Attracting students to the program is difficult.
5. While the teaching staff is highly qualified and active in research, a high percentage of lecturers are not employed full-time at RSU.
6. Issues exist with the diploma sample and the classification of the study program in existing regulations.

Evaluation of the study programme "Biostatistics"

Evaluation of the study programme:

Good

2.6. Recommendations for the Study Programme "Biostatistics"

Short-term recommendations

1) The percentage of lecturers employed at the RSU as their main job should be increased. Recruit lecturers in PhD in biostatistics/statistics.
2) The admission requirement is diverse, which is potentially an issue as this hinder students from taking more theoretical courses in the program. Create two specialisations (although options already exist to a certain degree) within the biostatistics programme depending on mathematical background allowing students to deepen their theoretical understanding.
3) Lack of theoretical courses. Create more advanced theoretical courses for students coming from a mathematical background.

Long-term recommendations

A recommendation is to create a chaired professor position in biostatistics together with a corresponding research biostatistical research group with lecturers having PhD in biostatistics/statistics. Recruit from abroad if necessary. In the long run a PhD program in biostatistics (perhaps joint with University of Latvia) could be implemented to ensure future competence.

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			The weaknesses indicated in chapter 1.2. Reflect evaluation criteria and are easily changeable, overall, the system of quality is well-made and ensures continuous development.

Requirements	Requirement Evaluation	Comment
R2 - Compliance of scientific research and artistic creation with the level of development of scientific research and artistic creation (if applicable)	Fully compliant	The management staff have clear ideas about the institutional goals related to research and its role in study programmes. Interdisciplinary and intersectoral research is supported. An effective and well- functioning mechanism is developed for the participation of academic staff into research. Teaching and research are well integrated, students are implemented in the research process. The management staff pays appropriate attention to innovations in research, teaching and learning. International cooperation in research occurs mainly through research projects. However, the number of international projects is insufficient and should be increased, but it is only for improvement and doesn't affect evaluation.
R3 - The cooperation implemented within the study field with various Latvian and foreign organizations ensures the achievement of the aims of the study field.	Fully compliant	RSU has several high-quality collaborations with relevant institutes, both nationally and internationally. This is particularly true for teachers involved in research connected to the biomedicine program, while the biostatistics program relies on lecturers from abroad. There is potential for increasing student mobility and a lack of a clearly defined strategy for developing internationalization, but this is only an area for improvement and does not affect evaluation.

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.	Fully compliant	Substantial improvements have been made by implementing the recommendations obtained in the study field and the associated study programs. Experts could not identify any significant lack of funding for research (except for resources to support the students' scientific work), lack of publications in international journals, lack of incoming international students, or decrease of enrolled Latvian students. Instead, both the study field and the academic master study program "Biomedicine"and "Biostatistics" are well-established and ever-developing study directions tightly connected with research on national and international levels, where students are enthusiastic about their future, while alumni and stakeholders are fully satisfied.

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	Biomedicine (45421)	Fully compliant	Fully compliant	Fully compliant	Partially compliant	Good
2	Biostatistics (45421)	Fully compliant	Fully compliant	Fully compliant	Partially compliant	Good

The Dissenting Opinions of the Experts

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