Expert group joint opinion

Evaluation Procedure: Assessment of Study Field

Higher Education Institution: University of Daugavpils

Study field: Wildlife Sciences

Experts:

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

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The study field and study programmes have clear aims that are in line with DU specialization and development strategy. SWOT analysis has shown the strengths of the DU and the direction to work on. Study field development plan is missing measurable targets. The management structure of the DU is appropriate, but different roles in the structure are fulfilled by the same persons. The DU has approved the students' admission rules and procedures for recognition according to requirements. Students' achievements are assessed according to unified procedures. Principles of academic integrity are set, promoted and applied.

DU has established a quality policy and maintains a quality assurance system, which contributes to the achievement of the aims and learning outcomes of the study field and the relevant study programmes. The quality assurance system follows the EU guidelines and practices. All internal administrative procedures, under which students may submit complaints and suggestions, are open to the public on the DU website. Students can get information by speaking with the director of their study programme, the dean, CSQA, and the Student Council. During the site visit it was also mentioned that surveys, done by Student Council, also helps and are taken into account, which is good, but at the same time - students can be overwhelmed by too many surveys. It is clear that a procedure for submitting student complaints and ideas has been developed and encourages the implementation of improvements. It was noted that the feedback provided to teaching staff, as an important step in the process, isn't entirely transparent - the director of the study programme is the one who collects all surveys and presents them to other members of Study Council and academic staff. Providing feedback to a teaching staff, encouraging students to give feedback using student surveys, promoting the outstanding teaching staff for their performance, based on the data, is suggested for improvement. But it is important to mention that quality assurance is much more than student feedback and implementing changes based on it. DU should consider introducing measurable KPIs and systems for evaluating quality of the study process and academic staff besides student surveys. More attention needs to be paid to the dynamics of students' attendance, grades, forms of examination and reasons for dropping out, maybe to several other factors considered to be important. Also, a system should be developed for following how introduction of new teaching methods (also digital) happens, how quality of study courses is evaluated each academic year, participation in the various courses and training needed to improve competences. Regular hospitation and feedback after it should be a normal practice - during site visit none of academic staff members were hospitated or had done it themselves.

DU has identified necessary resources to implement all the study programmes as prescribed by study field requirements. DU is equipped with materials, academic teaching staff and prerequisite administrative management systems. Although there are several points that could be improved, all the fundamental parts are in place, they just need to be refined and improved moving further.

The directions of scientific research correspond to the development goals of the university and are important for the field of study and the industry. The connection of scientific research with the study process is logical and justified, and its results are included in the study process in study programmes at all levels. International cooperation is ensured and developed.
DU has also developed mechanisms for involving teaching staff in scientific research. Mechanisms promoting student involvement in research are efficient and effective. The field of study uses innovative solutions that have a significantly positive impact on the study process.
Within the context of the study field, the DU collaborates with numerous organizations in Latvia that

includes higher education institutions, employers, employers' organizations, municipalities, non-governmental organizations, scientific institutes, etc., and this collaboration helps to realize the objectives and learning outcomes of the study field. DU's involvement in international initiatives and framework programmes, among other things, ensures the expansion of its interaction with other academic and scientific organizations. Except for contracts within the context of initiatives carried out by DU, the majority of cooperation agreements with other academic and scientific organizations are ongoing. There are some challenges regarding the mobility that relates to the insufficient recognizability among study programmes in biology taught in the EU. Part of the academic staff have insufficient command of foreign languages that reduces the potential of the study field in involving foreign students. Students have insufficient command of foreign languages and insufficient participation in international projects.
It seems that DU does not have a clear system for developing and monitoring the study process, i.e. improvement measures are mostly isolated, sporadic events. Current state is underutilized and should be improved for better results, including motivating students and academic staff for more engaged feedback. This has implications for the implementation of the recommendations from previous accreditation and licensing - some have been implemented (improving teachers' English language skills, specialization in certain scientific fields, keeping of the teacher programme), but a significant number have not been implemented in a substantive way. DU has not been able to increase the number of students, it seems that it has even dropped, there is no clear plan for promoting study programmes abroad and how to increase the number of graduates, especially for bachelors and masters study programmes. Also the number of guest lecturers has not increased and no new digital methods have been introduced in the study process.

BSP “Biology” complies with the regulatory framework, its graduates are in demand on the labor market and are both ready for it and to continue their studies at master's level. The content of the study programme ABSP “Biology” corresponds to the objectives of the study programme to equip matriculated students at DU with high-caliber theoretical knowledge and research abilities in the field of biology, as well as theoretical and practical preparation that satisfies state needs and enables successful participation in the solution of economic problems, competition on the Latvian and international labor markets, and advancement of their professional and academic education. The study programme plan includes mandatory elective part but no actual possibility to choose study courses is provided. However, the amount of students and graduates is dramatically low and dropout rates - high. Mostly, the proposed changes to the study programme are not fully argued. DU is equipped with modern and robust academic learning infrastructure. Students are provided with all necessary material provisions as well as teaching staff support to successfully achieve study programme goals. The academic staff generally is motivated, qualifies and cares for the study courses and students. Not all of the academic staff members have the minimum English language level of B2. Although DU has a plan to implement ABSP “Biology” in English, which is a great idea, unfortunately the study programme is not ready yet to be implemented for foreign students.

MSP “Biology” (45421) complies well with the regulatory framework, its graduates are in demand on the labor market. However, some of the learning outcomes of the AMSP could be revised to emphasize the knowledge and skills that are specific to the master's study programme. The content of the study programme aims to prepare high level specialists in the field of biology with deep theoretical knowledge and practical skills, capable of making independent decisions and conducting creative scientific research. The content is topical, interconnected and complementary, corresponds to the objectives of the study programme and ensures the achievement of learning outcomes, as well as meets the needs of the industry, labor market and scientific trends. The topics of students' final theses are relevant to the field and correspond to the study programme. DU boasts a

contemporary and robust academic infrastructure that empowers students with essential resources and the guidance of a dedicated teaching faculty, ensuring the attainment of their academic objectives. However, the limited enrollment of master's degree students places substantial financial strain on the entire study programme. Consequently, the recruitment of new students is of utmost significance to avert prospective fiscal instability. The academic staff consists of experienced and scientifically active people. Although the study programme is licensed to be implemented in English, there is still some preparation needed to start enrolling English speaking students.

DSP “Biology” (51421) complies well with the study field and current formal requirements, except study course descriptions. The number of students that enroll each year is stable, but the number of graduates must be higher. In the near future all DSP programmes in Latvia, including DSP “Biology” will face serious challenges due to the conceptual report “On the implementation of a new doctoral study model in Latvia”. The study content is in line with the demands of science, the job market, and current developments in business. The DU scientists collaborate with the local and international community to accomplish shared objectives by contributing their knowledge and originality to discussions. The study programme includes doctoral examinations, but the doctoral students are not informed about the procedures and content. The doctors of biological sciences who receive their education at DU contribute to their high employability and expansion of knowledge, which has a substantial positive impact on the growth of the national economy. Students are provided with a variety of specialized material and academic support, as well as opportunities to develop their thesis with international partners. The academic staff consists of experienced and scientifically active people. They offer a diverse range of research topics that are attractive to PhD students. In addition, they try to cultivate a friendly atmosphere at our faculty, conducive to good communication between supervisors and doctoral students. The study programme is almost ready to be implemented also in English if the teaching staff with an English language skills level of at least B2 is provided.

I - Assessment of the Study Field

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1.1 Management of the Study Field

Analysis

1.1.1. The aim of the study field (“To prepare qualified, internationally competitive specialists in the branch of biology who are able to independently plan and conduct research in biology and its sub-branches”) is clearly defined, it is relevant to the topics of the study field and all three study programmes of the study field. It also corresponds to the strategic specialization of the DU (according to the Cabinet of Ministers Order No 449 (21.06.2022.) DU specializations are natural sciences, social sciences, and humanities and arts sciences) (SAR, p. 14-16). Study field aim is also in accordance with the DU Strategy of Development which sets goals to provide high quality education, to prepare professionals and thus the study field in experts opinion ensures achievement of the DU overall goals. The study field includes three study programmes (bachelor, master and doctoral) and all these study programmes fit into the study field, making it possible for students to gradually and interconnectedly gain deeper knowledge in biology. The aims of the study programmes are connected with the overall study field aim (SAR, p. 61, 83, 112).

1.1.2. DU has performed SWOT analysis for the study field (SAR, p. 16-19), dividing all the SWOT parts according to the study field, study process, students, academic staff and other factors. The main strengths identified are high scientific quality of teaching staff, high quality infrastructure, contact between academic staff and students. The main weaknesses are state financing to higher

education that reduces opportunities for students to engage in science, language skills of academic staff, workload, and the low number of foreign students. DU also has made a development plan of the study field (SAR Annex 2.1.2_Study field development plan summary_EN.docx) to deal with weaknesses and threats shown in SWOT analysis. Main directions are closer integration of study and research process, renewal of academic staff, internationalization and digitalization. In experts' opinions those are appropriate directions to deal with weaknesses and threats, for example, implementation of the study programmes in English could increase the number of students and make a better financial situation.
Although the study field development plan covers main aspects (studies, research, material and technical facilities), it is hard to judge how realistic this plan is because there are no measurable achievable targets mentioned in the development plan, just planned activities and timeframe.

1.1.3. SAR (p. 20-21) and SAR annexes (1.2_Governance structure.png and 2.1.3_Management structure of study diection_EN.pdf) provide information about the persons and institutional units involved in the management of the study field and its study programmes. Responsibilities are clearly divided starting from study programme directors and ending with DU management. Main decision-making organ is the Council of the Study fields which includes members not only from the academic staff but also includes employers and student representatives. Internal structure of the DU has just changed (as explained during on-site interviews with management) and those can not be accessed at this moment.
Although the management structure of the study field and study programmes shows a clear hierarchical structure, multiple roles are filled by the same persons, potentially meaning that overlooking from one level to another hierarchy level is missing.
On-site interviews with the academic staff and with the administration showed that the support provided by administrative and technical staff ensures the necessary needs of the corresponding study programmes.

1.1.4. DU has set separate Admission Rules for each level of studies (bachelor, master and doctoral) and those rules are approved annually by the DU Senate (SAR, p. 21-22). Admission rules are also published on the DU webpage (webpage checked on 11.10.2023.) in Latvian. In English on the DU webpage there is published “Admission Regulations for International Students Applying to Full-Time Studies in 2023”. The homepage also contains admission requirements for each of the study programmes. DU has also adopted “Procedure in which a person can challenge and appeal decisions related to admission to a study programme at Daugavpils University” (SAR, p. 22).
DU has adopted two regulations regarding admission in later study periods and recognition of competencies - “Procedure for starting studies in later study stages at Daugavpils University” and “Regulations on recognition of competences acquired outside of formal education or professional experience and study results achieved in prior education at Daugavpils University” (SAR, p. 22). According to SAR, during the last six years, there were ten students resuming studies in later years. Documentation and number of recognitions prove that the system is implemented and working.

1.1.5. According to the SAR (p. 23), DU in the assessment of the students’ achievements uses principles of (i) clear and understandable assessment criterion, (ii) familiarizing instructors with examination methods, (iii) using an assessment that show if learning objectives are achieved, (iv) feedback to students, (v) consistent and fair assessment, (iv) possibility of appeal. The student evaluation system at the DU is regulated by the “Regulation on Studies at Daugavpils University”. DU uses different forms of assessment, such as seminars, practical assignments, mid-term tests and final exams. The final exams can be in oral or written form. For each study course the criteria, conditions and evaluation forms are written in the study course description. Also instructors inform students about the requirements at the beginning of the study course. DU uses surveys of students

to assess the quality of evaluation and study course content. If surveys show necessity for the changes, they are discussed in the Study Field Council and then DU Council of studies.

1.1.6. DU has developed procedures to promote academic integrity principles. DU has approved "Code of Ethics for Employees and Students of Daugavpils University", which sets basic principles of ethics for students (for example, supporting and maintaining academic integrity, not allowing plagiarism) and for employees (for example, assessment of students work fair manner, maintaining academic integrity, not allowing plagiarisms in own and students work) (SAR p.24-25). There is the Academic Arbitration Court also dealing with the academic integrity questions (SAR p. 8). DU has approved the "Procedure for submission of final works for plagiarism control at Daugavpils University" which sets rules for how final examination works are submitted and checked for plagiarism in the control system PLAG LV (SAR p. 25). According to the SAR (p. 25) students are informed about the academic integrity principles and consequences of their violation as part of several study courses. SAR does not provide any example of plagiarism and also during the meeting with the director of the bachelor and master study programme it was stated that in the field of biology, there are no such cases.

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

The study field and study programmes have clear aims, that are in line with DU specialization and development strategy. SWOT analysis has shown the strengths of the DU and the direction to work on. Study field development plan is missing measurable targets. The management structure of the DU is appropriate, but different roles in the structure are fulfilled by the same persons. The DU has approved the students' admission rules and procedures for recognition according to requirements. Students' achievements are assessed according to unified procedures. Principles of academic integrity are set, promoted and applied.

Strengths:
1. The study field and study programmes have clearly defined objectives that align with the specialization and development strategy of DU.
2. Academic integrity principles are established, promoted, and enforced.

Weaknesses:
1. The study field development plan has no measurable targets.
2. Multiple study field and study programme management roles are fulfilled by the same persons.

1.2. Efficiency of the Internal Quality Assurance System

Analysis

1.2.1. DU has created a quality policy that is available to the general audience (DU home page: https://du.lv/en/about-us/documents/; Annex 1.3_List of Regulations for internal quality assurance.pdf; Annex 1.3._Internal Quality Assurance Policy Of Studies At Daugavpils University.pdf).
The Internal Quality Assurance Policy of Studies (Policy) at DU is focused on realizing international level scientific research and ensuring quality studies in the fields of natural sciences, engineering, education, health, humanities, and social sciences, as well as promoting the sustainable development of the Latgale region and the world (SAR p. 26).
The European Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG) have been taken into consideration when developing the Policy. The European Foundation for Quality Management Excellence Model (EFQM) criteria provide the basis for the Policy

(SAR p. 26).
The administration of study field and the quality assurance system, such as the operation of the DU Council for Studies and DU Study Quality Assessment Centre (hence - SQAC), play a significant role in the implementation of the study process. The goal of assuring the quality and management system of the educational process is to ensure that the study programmes' content complies with the standards for higher education, the caliber of science, as well as the needs of the Latvian and EU labor markets (SAR p. 27).
The DU has created and upholds a quality assurance system, which aids in the accomplishment of the objectives and learning outcomes of the study field and the pertinent study programmes, for example, there is inner quality control of the study field carried out by the Council of the study field, annual self-assessment reports for the field are prepared, regular review of the study course descriptions, students are actively engaged in the development of the study process, and the evaluation of student achievements corresponds to the approach defined in the guidelines for quality assurance in the European higher education space. Additionally, the study quality system is being updated with EU funded projects that aimed to ensure the improvement of the existing normative documents and procedures at DU and compliance with the student centered and sustainable higher education, especially assessing and updating quality policy implementation mechanisms.The internal quality of studies is ensured by the following: strategic planning of the process of studies; examining the issues related to the process of studies, surveys, self-assessment of the study direction and preparation of the self assessment report, E-study environment improvement. Effective outcomes are attained by complete collaboration of relevant stakeholders, process governance, administration knowledge and support, and the successful implementation of DU strategy and policy by academic staff. (SAR p. 20, 21 and 27).
In order to fully accomplish the goals set forth in the study programme and to meet the established objectives, an evaluation of the quality of studies is carried out with the goal of controlling the implementation of study programmes and plan development. Continuous quality control is practiced in admitting students, recruiting academic staff, evaluating and improving study programmes, evaluating the activities of structural units, their managers and staff, in light of the effectiveness of science and the outcomes of academic activity. By implementing connected control and improvement strategies, the study quality assurance center fosters confidence in DU's operations and higher education in general (SAR p. 27).
The system guarantees the ongoing development, advancement, and effective operation of the study area and the pertinent study programmes (SAR p. 27).
The effectiveness of the internal quality assurance system within the study field is evaluated by describing the steps taken to meet the objectives and results of the study programmes and to ensure continuous development, growth, and effective performance of the study field and the relevant study programmes (SAR p. 27).
By carrying out related control and improvement actions, the study quality assurance center fosters trust in DU's operations and higher education in general (SAR p. 27).
The following activities are carried out in order to effectively execute the internal quality assurance system of studies within the study field “Wildlife Sciences” (SAR p. 27):

1) The academic staff of the study field “Wildlife Sciences” conducts internal quality control for the Study Field "Wildlife Sciences" in conjunction with the Council of Study Directions. At the council meeting for the study field "Wildlife Sciences" at the conclusion of each academic year, improvement activities for the direction development plan and study quality are discussed and evaluated.
2) A study field self-evaluation report on the prior academic year is prepared by the head of the study field "Wildlife Sciences" once throughout the academic year in collaboration with the programme directors.

3) The course content is updated on a regular basis, and lecturers add the most recent readings and practical class formats. They also check the course descriptions.
4) As study programmes in the field are implemented, employers, graduates of the programmes, industry professionals, and lecturers involved in the programmes are regularly surveyed (surveys, analysis of some programme components, participation of employers and DU graduates in the study council), allowing for a closer alignment of the program's content with the needs of the labour market. The graduates' active involvement in the academic programme of the institution, including their guest lectures, internships, and employment opportunities, helps to improve the quality of the study work. In the context of scientific and practical conferences and professional seminars, there is a regular flow of ideas between the academic community and employers.
5) The academic and scientific work is regularly compared to the content of Wildlife Sciences study programs offered at other Latvian higher education institutions.
6) The academic staff of the study field "Wildlife Sciences" regularly takes part in training sessions to advance their remote work skills, for example, to ensure optimal use of the capabilities of the e-learning environment Moodle. In line with the ESF project "Reduction of Fragmentation of Study Programmes of Strengthening of Shared Use of Resources at Daugavpils University," Nr. 8.2.1.0/18/A/019, seminars for lecturers were held to develop and integrate the study course materials required to support a study process.
7) The integration of the study process and research activities is continually strengthened since it is seen as a crucial component of the quality assurance system.
8) The study process is constantly strategically planned, with weaknesses of the study program, dangers, development prospects, and other relevant factors being examined.
9) The courses that must be taken during the semester are listed in the DUIS personal profiles. The student has access to the course descriptions, among other information, in each course.
10) Academic staff from the study field "Wildlife Sciences" participates in scholarly and methodological conferences, seminars, and certification training courses as speakers or listeners, regularly enhancing study curricula with cutting-edge study formats and contemporary approaches (SAR p. 27).

DU has a list of activities and measures developed for the improvement of the study plans specific to the subject of study. As a result from these measures the number of scientific publications developed and published in journals Q1–Q2 increased and continues to increase, the involvement of students in research projects increases, etc., all of which have a positive impact on the standard of studies in the study field "Wildlife Sciences" (SAR p. 28).
DU has established a quality policy and maintains a quality assurance system, which contributes to the achievement of the aims and learning outcomes of the study field and the relevant study programmes. The system ensures continuous improvement, development, and efficient performance of the study field and the relevant study programmes. The quality assurance system follows the EU guidelines and best practices. However, some of the activities are project dependent, while they should be more systematic and applied in the long term, such as support for teaching staff methodological skills development. Additionally, recognition of a work of professors is not developed very well as it depends on the personal nomination, and not the collected data. From the presented data and the observation from site visit it is evident that the mechanism for submission of student complaints and suggestions is developed and promotes the implementation of improvements. Students are informed about such opportunities and receive feedback. However, as it was observed that some steps in the process are not fully transparent and there is space for improvement. When it comes to the feedback to teaching staff the decision on the comments relies on the director of the study programme, which leaves space for improvement. The study programme's director provides feedback to a teaching staff by informing students, faculty and employers of the results of students feedback on teaching staff performance. In meetings with both the teaching staff and the students

of the study field, the recommendations from the surveys and the prevention mechanisms are discussed. Student representatives take part in direction council meetings and the creation of responses to survey responses. The feedback to a teaching staff is also focused on the negative feedback, but not the positive one. In order to have a more transparent quality assurance system and to maintain the effectiveness of the QA system, it is necessary to introduce more transparent decision making on the complaints, not to rely on one person, rather on few levels of decision making. It is recommended to develop a clear and transparent system of providing the feedback to teaching staff and students on the evaluation of teaching staff and students complaints.
Additionally, as it was observed, only few students are giving feedback at the end of each academic year. Students are not aware of the importance of giving feedback and are using some more unconventional ways of giving complaints, such as addressing complaints to the rector. It would be extremely necessary to communicate better with students on the importance of giving feedback and how the process works, on the transparency of the QA system. It is suggested to involve more students in providing the feedback, using some of the good practices developed by other universities. In order to encourage good work of the teaching staff, some of the promotional activities should be implemented. So far the nomination on the best performing teaching staff relies on the nomination from other teaching staff, which is not a fully transparent way of promotion. When the student feedback would be used to its full potential, and data gathered in a systematic way, the promotion of the good practices and excellent performing teaching staff would be made on data gathered in student surveys. Therefore it is highly necessary to communicate well, encourage students on the benefits of giving feedback using student surveys. But it is important to mention that quality assurance is much more than student feedback and implementing changes based on it. DU should consider introducing measurable KPIs and systems for evaluating quality of the study process and academic staff besides student surveys. More attention needs to be paid to the dynamics of students' attendance, grades, forms of examination and reasons for dropping out, maybe to several other factors considered to be important. Also, a system should be developed for following how introduction of new teaching methods (also digital) happens, how quality of study courses is evaluated each academic year, participation in the various courses and training needed to improve competences. Regular hospitation and feedback after it should be a normal practice - during site visit none of academic staff members were hospitated or had done it themselves.

1.2.2. The "Daugavpils University Regulations on the Opening and Management of Study Directions and Study Programmes"establish the guidelines for the opening and administration of new study fields and study programmes. The Law on HEI and other binding regulatory acts of the Republic of Latvia, the DU Constitution and other binding DU regulatory documents, as well as the regulations on the opening and management of DU study fields and study programmes, are intended to establish the principles, content and implementation requirements for the opening and management of DU study fields and study programmes. The regulations specify the process for opening, managing, developing, and quality assurance of DU study fields and study programmes. They also specify the process for closing study fields and study programmes; guiding principles of the study field council and the responsibilities, rights, and educational requirements for the head of study field and study programme directors. At least one academic year before beginning the study programme execution, a new study programme is developed in compliance with the DU plan or other strategic and study process regulation documents (SAR p. 29).
According to the "Daugavpils University Study Programme Development and Consolidation Plan," consolidation of AMSP "Biology" and AMSP "Nature Recreation" was completed during the reporting period within the study field "Wildlife Sciences." The consolidation led to the creation of a new AMSP "Biology". In order to stop student enrollment from declining and study programmes from becoming more dispersed, as well as to lessen course overlap and fragmentation, study programmes have been consolidated. The content of the Master's study programmes implemented in the study field

"Wildlife Sciences" as well as the available resources and technical provision at DU were evaluated as part of the SAM project "Reducing the fragmentation of study programmes and strengthening the sharing of resources at Daugavpils University" (No. 8.2.1.0/18/A/019). A new study topic for AMSP called "Biology" has been produced in response to advice from branch specialists (including employers' representatives) involved in the project's creation of the study programme. The newly created AMSP "Biology" specialization "Aquaculture" was developed using the recommendations in the study commissioned as part of the project "Improving Daugavpils University Management and Management Competencies," agreement No. 8.2.3.0/18/A/010, carried out by the Latvian Institute of Hydroecology, as well as forecasts for human resource development in the STEM fields and the recommendations in the analysis. The developed characteristics of the study programme were discussed and analyzed at the DU Council of Studies, the DU Faculty of Natural Sciences and Mathematics Council meeting, Council of the DU study field "Wildlife Sciences", the DU Senate meeting and in 2021 AMSP "Biology" received a license (SAR p. 29-30; DU home page: https://du.lv/wp-content/uploads/2021/12/3_DU_Studiju-virzienu-un-studiju-programmu-atversanas un-parv-nolikums.pdf; SER Annex 1.3_List of Regulations for internal quality assurance.pdf; 2.6.1.Expert opinion_Life Sciences_2011.pdf; SER Annex 1.3._Internal Quality Assurance Policy Of Studies At Daugavpils University.pdf).
Since there was a recent procedure for the development and review of the relevant study programmes of the study field it is evident that the system is well developed and functioning. From the Internal quality assurance policy of the studies at DU it is evident that there are feedback mechanisms developed, including feedback to students, employers, and graduates; and is available for all stakeholders as described in section 1.2.1. of this report.

1.2.3. Student concerns and suggestions could be submitted and taken into account as part of the study quality system. Analyzing the procedures, gathering a thorough survey of the reasons behind submitted complaints, and giving the individual who made the complaint or proposal feedback are all important to ensure that the quality of the study process is improved. Students have the right to make complaints and suggestions to the rector, dean, vice-rectors, main department heads, and director of the study programmes. Depending on their importance, complaints and proposals are accepted verbally, in writing, and online form of communication. The DU accepts complaints and suggestions from individuals, groups, publicly (with the submitter's name included), and anonymously. Following the guidelines outlined in "The Law on Submissions" (https://likumi.lv/ta/id/164501-iesniegumu-likums), entries are prepared and accepted at DU. DU academic, administrative, and general staff, as well as students, may make submissions on potential violations of the standards of the "DU Code of Ethics", including action or conduct outside of DU, if that action or conduct harmed the reputation of DU. The Student Council (DU home page: https://du.lv/en/students-council/), who may act as the student's representative while the complaint is being examined, may submit on behalf of the students. The DU Academic Court or Arbitration reviews complaints from students and academic staff on infringements and violations of the academic freedom and rights guaranteed by the Constitution. Submission of open grievances and proposals DU students may make open grievances and proposals in any format they want, as long as they follow the guidelines outlined in the DU interior normative acts (SAR p. 30; DU home page: https://du.lv/en/about-us/study-quality-assessment-centre/ and https://du.lv/wp-content/uploads/2022/06/ENG-NOLIKUMS_PAR_STUDIJAM_DU_2018-1-1.pdf; SER Annex 1.3_List of Regulations for internal quality assurance.pdf; 2.6.1.Expert opinion_Life Sciences_2011.pdf; SER Annex 1.3._Internal Quality Assurance Policy Of Studies At Daugavpils University.pdf).
Anonymous complaints are sent electronically. After reviewing and analyzing the complaint, the CSQA organizes discussions with the parties concerned and, if necessary, monitors the study quality. According to "The Regulation of Daugavpils University Student Council", the Student Council has the

right to request and receive information from any structural unit of DU regarding all matters in its competence that concern students' interests. In the past, CSQA closely cooperated with the Student Council in the examination of anonymous complaints, examining the situation and taking steps to improve the study quality (SAR p. 30).
The "Order whereby a Person may Dispute and Appeal Decisions Related to Enrolment to a Study Programme at Daugavpils University'' is in effect at DU, and it states that a person may challenge the decision of the Enrolment commission on the results of the competition by submitting an application to DU rector within seven working days of the publication of the competition results. This is done in order to examine complaints related to enrolment (SAR p. 30).
All internal administrative procedures, under which students may submit complaints and suggestions, are open to the public on the DU website. Students can get information by speaking with the director of their study programme, the dean, CSQA, and the Student Council (SAR p. 30).
In order to ensure thorough investigation of the dispute or issue, CSQA coordinates the evaluation of students' complaints and proposals and, where necessary, arranges explicit surveys, carries out study quality monitoring by attending classes and speaking with students and the academic staff (SAR p. 30).
The offer of library services was improved, and the methods and tools for organizing remote learning were diversified for all DU students, including those studying in the "Wildlife Sciences" study field, during the implementation of the remote study process in the 2019/2020 spring semester. The head of the study field and the directors of the study programmes regularly communicate with the students of all levels while implementing the remote study process in the academic years 2019–2020, 2020–21, and 2021–2022, monitoring the study process of the study programmes of the field (SAR p. 30).
In the previous accreditation period CSQA has received verbal and written complaints about the quality of the studies, like discrepancies between the credit requirements stated in the study course description and the methods used to assess students' knowledge and skills during the study process, proposals for the schedule, issues with communication, etc. Every complaint and suggestion is always discussed with the parties involved. The director of the study programme, along with the head of the study field and vice-rector for studies, if necessary, participates in the review of complaints and proposals. Following a situational analysis, potential solutions are identified, students are continuously updated on the status of the implementation of the complaints and/or proposals, and the CSQA offers consultations on issues relating to study quality. DU routinely hosts meetings of the management and the director of the CSQA with the Student Council, when students' issues, grievances, and suggestions for enhancing the caliber of education are recognized and discussed. These meetings take place once a month (SAR p. 30 -31).
The information provided in the SAR and the site visit observations make it clearly evident that a process for reporting complaints and suggestions from students has been established, and it promotes the adoption of enhancements. It was observed that not every stage in the procedure is completely clear. The effectiveness of the quality assurance system must be increased, and a more transparent complaint decision-making procedure must be put in place to prevent depending too heavily on one level of decision-making. More details can be seen in 1.2.1. of this analysis.

1.2.4. The statistical data collection mechanism established by the higher education institution / college is efficient, ensures regular collection and analysis of information (statistics) on the study programmes corresponding to the study field (links to employer and alumni surveys: https://aptaujas.du.lv/index.php/764263/lang-lv and https://aptaujas.du.lv/index.php/544412; SAR Annex 2.2.4. Analysis and evaluation of the results of all surveys).
When collecting physical personal data, DU does so only in accordance with the methods and limits outlined in the normative acts, and only for specific, legitimate, and legal purposes. DU runs the educational system DUIS, which contains statistics and data on study plans, students, and academic

staff. The DU internal network provides access to the system. Directors of study programmes and faculty records managers enter data into DUIS; the Department of Studies summarizes and verifies it. Data from the DUIS system are transferred to the State Education Information System (SEIS; https://www.viis.gov.lv/; https://likumi.lv/ta/id/307796-valsts-izglitibas-informacijas-sistemas-noteikumi) at the end of each month. Data export is carried out in accordance with Cabinet of Ministers Regulation No. 276 of June 25, 2019, titled "Terms of State Education Information System". Personal data from DU students, information about their status (matriculated and ex-matriculated student numbers, changes to their status, such as semester of study or academic withdrawal, etc.), and other data are included in the SEIS data export (SAR p. 32).

Student survey results, which are released by the Center for Study Quality Assessment, are one of the key tools improving study fields. 3 times a year: 2 months after starting their studies for first-year students, after the winter and summer graduation. At the conclusion of each study programme, student surveys are organized in specific ways. Based on the data and information provided in the surveys, CSQA conducts individual student group surveys and audits lectures as needed. It also arranges interviews with academic staff members to discuss the measures of the study quality improvement. The study field self-assessment reports reflect the findings of the analysis of the survey data that is done using the DU survey system (Open Source Project LimeSurvey). DU also conducts surveys of employers and graduates. Data from the alumni survey include information on career trends, evaluations of the study programmes that were acquired, and suggestions for their development. Employer surveys are conducted, and the heads of the study programmes summarize the results. Their objective is to gather suggestions for development and improvement (SAR p. 33).

The director and the teaching staff who are implementing the study programme in place receive the information from students. Making a decision regarding essential adjustments in the content of the study courses or in the organization of the study process is made possible by evaluating the quality of the study programmes of the study field and specific study courses (SAR p. 33).

At the conclusion of each academic year, the SQAC conducts a student survey, the findings of which provide information on the evaluation of the study quality and related factors. The student survey is accessible online. Survey questions for employers, alumni, the engagement of foreign teaching staff, planning the upcoming academic year and results of student surveys are taken into consideration. Alumni evaluate the progress of the study programme as well as the relevance of the gained knowledge, skills, and competences in professional activity. Graduates may be surveyed or interviewed right away or at various intervals (six months, a year, or three years) following graduation Following internships, employers are questioned; on average, a survey of employers that are not involved in providing internships is conducted every two years.(SAR p. 33).

All valid ideas, suggestions, and criticisms made in the survey questionnaires are addressed by the study programme director, and when necessary, they are brought up for discussion by the study field council. The study programme director informs all parties concerned (students, academic staff members, employers, and alumni) after introducing the changes to the study programme's content, providing input (SAR p. 33, Annex 2.2.4. Analysis and evaluation of the results of all surveys).

It is evident that the statistical data collection mechanism established by the DU is efficient, ensures regular collection and analysis of information (statistics) on the study programmes corresponding to the study field. The mechanism for obtaining and providing feedback, including from students, graduates and employers, is effective and focused on the improvement of the study field. As mentioned previously, the special focus should be put on good communication towards students to use the opportunity of giving feedback, using surveys.

1.2.5. Students have access to and can find all the information they need on the DU website in both Latvian and English on studies, the faculty, study field, and study programmes. The "Studies'' part of the DU website provides details about the DU faculties, study programmes, possibilities to audit

study courses, and opportunities for continuing education that the DU Life Long Education Center offers. The "Study programmes'' section of the DU website provides details on all study programmes offered at DU, including ABSP "Biology", AMSP "Biology" , and DSP "Biology". The website offers details on each study programme's admission requirements, study course descriptions in both English and Latvian, options for students after graduation, and contact information for the study programme director (SAR p. 34; https://du.lv/en/studies/ ; https://du.lv/en/studies/study-programmes/).
The International and Public Relations Department is in charge of making sure that the data on the study fields at DU that is available on the DU website corresponds to the data present in the official registers. In turn, the Study Department is in charge of providing information about students (SEIS) on a regular and timely basis (SAR p. 34).
DU e-study environment Moodle is used to provide information on the courses acquired during the semester. For each course students have access to the following information: study course description, criteria of assessment, materials for student independent work, etc (SAR p. 12).
The criteria is well met.

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

DU has established a quality policy and maintains a quality assurance system, which contributes to the achievement of the aims and learning outcomes of the study field and the relevant study programmes. The quality assurance system follows the EU guidelines and practices. All internal administrative procedures, under which students may submit complaints and suggestions, are open to the public on the DU website. Students can get information by speaking with the director of their study programme, the dean, CSQA, and the Student Council. During the site visit it was also mentioned that surveys, done by Student Council, also helps and are taken into account, which is good, but at the same time - students can be overwhelmed by too many surveys. It is clear that a procedure for submitting student complaints and ideas has been developed and encourages the implementation of improvements. It was noted that the feedback provided to teaching staff, as an important step in the process, isn't entirely transparent - the director of the study programme is the one who collects all surveys and presents them to other members of Study Council and academic staff. Providing feedback to a teaching staff, encouraging students to give feedback using student surveys, promoting the outstanding teaching staff for their performance, based on the data, is suggested for improvement. But it is important to mention that quality assurance is much more than student feedback and implementing changes based on it. DU should consider introducing measurable KPIs and systems for evaluating quality of the study process and academic staff besides student surveys. More attention needs to be paid to the dynamics of students' attendance, grades, forms of examination and reasons for dropping out, maybe to several other factors considered to be important. Also, a system should be developed for following how introduction of new teaching methods (also digital) happens, how quality of study courses is evaluated each academic year, participation in the various courses and training needed to improve competences. Regular hospitation and feedback after it should be a normal practice - during site visit none of academic staff members were hospitated or had done it themselves.

Strengths:
1) CSQA developed as special department dedicated to quality assurance system.
2) Well developed legal and administrative framework.

Weaknesses:
1) Activities related to teaching staff methodological skills development are project dependent, while they should be more systematic and applied in the long term.

2) Providing feedback of DU to a teaching staff, on their performance, following student's survey, is not transparent.
3) Providing feedback of DU to teaching staff, on their performance, following student's survey, is focused on negative feedback, and lacks positive feedback.
4) Low motivation from students and low responsiveness in giving feedback using student surveys.
5) No regular hospitation has been happening in the study field.
6) No system for monitoring and continuously developing individual members of academic staff and quality of study courses they are responsible for has been introduced.
7) Several high positions are held by the same persons (administrative, academic, scientific and also as members of councils etc.) and it is easy to run into conflict of interests.

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: Partially compliant

There is a partial compliance with the Law on Higher Education Institutions as there is missing systematic approach to development of methodological skills (Section 5, Paragraph 2., point 4)), as well as problems with transparency of the feedback ((Section 5, Paragraph 2., point 1))). (SAR chapter on quality assurance, SAR annex 1.3_List of Regulations for internal quality assurance.pdf, onsite visit)

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

DU has established a functioning quality assurance system of higher education (SAR p. 26-28, SAR Annex 1.3. Internal Quality Assurance Policy of Studies at Daugavpils University.pdf)

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

DU has a system for development, approval of new study programmes, supervision of their performance and periodic inspection thereof (SAR p. 29-30)
1.3_List of Regulations for internal quality assurance.pdf

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

The criteria and procedures of evaluation of students' results are in place (SAR p. 23-24)
1.3_List of Regulations for internal quality assurance.pdf

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: Partially compliant

Even though the internal procedures and mechanisms for assuring the qualifications of the

academic staff have been developed, there is still missing the systematic methodological skills development and continuous support for professional development of teaching staff. 1.3_List of Regulations for internal quality assurance.pdf

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

DU conducts student surveys and analyse data (SAR chapter 2.2, interviews with management)

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: Partially compliant

There are several weak points in the quality assurance, one is regarding the low number of students using surveys and non-transparency in the Quality Assurance System regarding the feedback.
1.3_List of Regulations for internal quality assurance.pdf

1.3. Resources and Provision of the Study Field

Analysis

1.3.1. DU main funding is allocated from the Ministry of Education and Science, depending on parameters like number of students, study programme level and study field priority. Further distribution of finances is done centrally by the DU department of Finance and Accounting as shown in the Self Assessment Report (SAR p. 77-78). Precise systems of resource allocation and dissemination are defined and implemented according to the needs of study field courses. This funding is primarily used to cover operational costs of DU, like salary, teaching supplies etc. For larger capital investments and improvements DU relies on outside sources of financing from various projects like European Regional Development Fund (ERDF), European Social Fund (ESF). Such a type of financing structure creates large risks of liquidity issues and should be actively mitigated whenever possible, like identifying more potential capital streams.
DU also has implemented support systems for its academic staff in their research requirements (SAR p. 35-36). There is a possibility to enter DU organized research competitions to secure additional funding for research goals. DU academic staff also have the right to receive remuneration and royalties for the citation characterizing Hirsch index in SCOPUS and/or Web of Science (hereinafter referred to as WoS) databases.
Similarly, DU bachelor's and master's study programmes students also have similar opportunities to apply and receive funding to develop their practical, scientific, project managing skill and ultimately publish results in WoS and/or SCOPUS databases. In addition during the interview process, faculty staff also informed about the possibility for students to also apply to receive supplemental funding from a private scholarship fund in Denmark. During the interviews with DU students, their knowledge about these financing opportunities were mixed. It would be advisable to inform the student body more thoroughly about these options and motivate them to participate.

1.3.2. As described in more detail in SAR (p. 37-38) DU has purposely invested in specified modern scientific tools and materials for both teaching purposes and research goals as well. That could be observed during the on-site visit of study and research units of Institute of Life Sciences and Technologies at DU. DU students have access to well-equipped and stocked laboratories and

specialized offices for higher education purposes. As described in more details in the provided annex (2.3.2.Infrastructure and un material and technical provision_EN.docx) students have access to multiple general teaching laboratories with necessary equipment (microscopes, fume cupboards, safety equipment) and supplies for laboratory works and study purposes. Students can also access more specialized facilities, for example the isolation, identification and research of various parasites. There is also a satisfactory amount of highly motivated and professional teaching staff that can educate and instruct students to ensure the necessary study or research objectives. Students also have access to DU Study and Research Center "Ilgas" where they can effectively learn necessary field study courses as per study plan (SAR p.100). In addition to practical field study experiences DU Study and Research Center "Ilgas" also provides students with modern on site laboratories and research facilities in the fields of coleopterology and forest biodiversity. Facility provides a unique collection of various herbariums and coleoptera samples as well as opportunities for micro/nano-resolution X-ray microscopy.During the visit and interviews with representatives of faculty and DU students, a minor point of vulnerability was identified in the highly specialized nature of research staff members. While students can acquire sufficient base level knowledge in different study fields of biology, they are restricted in pursuing scientific research or further academic opportunities in areas that are not the chosen specialty of institute employees. Like for example molecular biology or microbiology. As an example, research facilities are lacking necessary equipment for isolation, cultivation, identification and experimentation with various microorganisms (bacteria, fungi).
DU reliance on different projects to fund their educational programmes and supplies is also a possible point of vulnerability. While this type of financing system is incredibly common in fields of higher education it would still be advisable to make financial infrastructure of study field courses independent from outside financing.
According to regulations detailed in the constitution of Daugavpils University (https://du.lv/wpcontent/uploads/2022/09/DUSatversme_17.06.2022.pdf (17.06.2022)) DU rector is primarily responsible for the formulation and allocation of financial resources, while DU Finance and Accounting Department provide calculations of costs per student, dependant on study programme. The University Senate serves as an advisory body, and the overall confirmation is made by the University council. Consequently the rector is responsible for realization of budget and must provide annual reports. Additionally once per year an independent audit is carried out to provide veracity for any and all financial claims.

1.3.3. DU provides a comprehensive library collection for both academic and research purposes (SAR p. 38-39). Students have easy access to a vast catalog of books and periodicals both in Latvian and English languages that are used in study programme courses.The library collection consists of 267,655 items, which includes books, periodicals and other editions. Number of books in the field of biological sciences – 3487, incl. 923 in English, that is 26% of the books in the field of biology; in the field of environmental sciences – 1995, incl. 300 in English, which is 15% of the books in the field of environmental science.
The process for ordering new materials or replenishing old is well developed, clearly described and implemented well. As previously stated in the self assessment report faculty staff initiate purchase procedures for new study materials or renewal of already existing materials (SAR p. 38-39). Applications for the purchase of books are regularly reviewed and approved by the DU Budget Commission, afterwards DU library performs purchase mechanisms. As told by the library representative during the site visit, university students can also fill applications for procurement of books and periodicals, and it is approved by the same process. Reading rooms provided by the library are also well equipped with enough physical space as well as additional electronic equipment to ensure an efficient reading environment.
One shortcoming, that was identified during the visit and analyzing course curriculum requirements, was the fact that in multiple study courses the compulsory or supplemental reading list consists of

books/materials provided only in latvian language. As an example in annex (3.2.1.ABSP Biology_Description of study courses_EN.zip), in study courses ornithology and histology all required reading materials are written in latvian, similar situations can be found in multiple study programme courses. Which consequently begs the question how international students are expected to independently learn the subject matter. Therefore it is essential that DU takes steps to determine if there is a possibility to substitute these compulsory reading materials with English alternatives without sacrificing study quality for international or local students and make sure that DU library have capability to provide them as needed. If there is no possibility to substitute these materials then a more extensive revaluation of study course plans and criteria has to happen.

1.3.4. As stated in the SAR (p.40-41) DU has adopted and integrated e-learning system (Moodle) as a digital platform for its faculty and students. During the interviews neither party had anything adverse to say about it or could share any adverse experiences. Students are provided ease of access to the system, it itself is easy and intuitive to use and it achieves its basic goal.
The results of the ESF project "Reduction of Fragmentation of Study Programmes of Strengthening of Shared Use of Resources at Daugavpils University," Nr. 8.2.1.0/18/A/019, where seminars for lecturers were held to develop and integrate the study course materials required to support a study process, are evident. The academic staff of the study field "Wildlife Sciences'' regularly takes part in training sessions to advance their remote work skills, for example, to ensure optimal use of the Moodle e-learning platform's capabilities. Even the students and the lecturers have constant access to the Internet and the Internet connection of the local DU network, e-learning environment Moodle, as well as the opportunity to use e-mail and teleconferencing, various online platforms, such as ZOOM, it was evident the incomplete introduction of module system into implementation of the study programme. For the purpose of efficient implementation of the study programme, and more flexible orientation towards student-oriented learning process it would be necessary to seize more the opportunities offered by Moodle system and e-platform. By using e-learning, students are less likely to discontinue their studies when their jobs or health issues prevent them from attending all study sessions in full. In order to maintain the critical mass of students and ensure the training of specialists for not only Eastern Latvia, which is represented by the majority of DU students, but also for other regions of Latvia and abroad, activating the e-learning environment is a crucial step.
As demonstrated during the site visit to the expert panel, the Moodle system at the moment is primarily used as a platform for lectures and supplemental materials which is only a small part of the e-platforms potential. Academic staff should be strongly motivated to use all possible functions available in this distance learning system (tests, knowledge proficiency exercises etc.) to further improve the e-learning environment.

1.3.5. Procedures and regulations for employing academic members are well defined and implemented (“Regulations on elections in academic positions at Daugavpils University” Available: on webpage [viewed 06.10.2023]). Information about vacancies for academic positions are reported and available online on DU site. Professional requirements for potential candidates are detailed, concrete, and open to all interested parties. These points are regularly reviewed and amended as necessary. Election procedure is open and transparent.
Should DU decide to attract foreign teaching staff, current promotional activities would be insufficient, and a new advertisement strategy would be needed to interest potential applicants. Currently, recruitment policies are only on local national scale (SAR p. 40-41), which are unlikely to reach any interested international parties. It would be advisable for DU to identify their unique and speciality academic or research opportunities and focus their marketing on those, for example, possibilities in micro/nano-resolution X-ray microscopy, biodiversity or environmental research. It could benefit their efforts in both attracting new faculty as well as students. DU has made inroads in cooperation with other universities and international partners to increase their global recognition, as

well as promotion with e-marketing, and participation in international school fairs and agency forums, which is commendable and these efforts should be continued (SAR p. 56).

1.3.6. According to SAR (p. 41-43) DU has selected specific criteria by which to evaluate their academic staff (excellence, ability to use academic freedom, academic culture and responsibility). Furthermore, DU has taken steps to cultivate these traits in their staff members, by providing multiple professional development programmes. It is commendable that in addition to seminars and training about how to improve their professional academic skills, DU has also provided training in self-care, stress management and other personal improvements.
DU has developed defined evaluation points and criteria for each academic position. Evaluations are performed regularly and employees are provided with clear quantifiable results (The procedure for evaluating the scientific activity of the academic staff of Daugavpils University. Available: on webpage [viewed 09.10.2023]).
DU academic staff are also enthusiastic participants in the “ERASMUS+” mobility programme. Over the last six years on average eight faculty members are participating each year, both in teaching positions and in professional development capacity at multiple universities in different countries (SAR annex 2.5.3. Incoming and outgoing mobility academic staff_EN.docx). Usual period of stay is only five days, a longer visitation duration would be advisable, but it is also understandable that it would be impossible due to other academic or research obligations. Also outlining any teaching practices or techniques inspired by these visits could furthermore help to develop professional competence.
Employed academic staff have necessary knowledge of the national language as confirmed in attached annex (2.3.7. Statement native language). However, there are some discrepancies in English language proficiency validation. In the provided (annex 2.3.7. Statement_foreign_language) it states that all academic staff involved in the implementation of the study field programmes have language proficiency of at least B2 level, while the provided CV’s of academic staff (annex 2.3.7. CV of academic staff) show that multiple lecturers have English proficiency level as B1. Faculty staff whose english proficiency level is below mandatory minimum should be replaced until their expertise is sufficiently improved.

1.3.7. Currently, the University of Daugavpils employs 25 full-time teaching staff members, supplemented by an additional 9 visiting academic members (SAR p. 43-44). This composition ensures an adequate ratio of faculty staff to students, facilitating the achievement of specific programme objectives. Moreover, it enables an equitable distribution of student mentoring responsibilities among the staff. Given the university's relatively low student-to-faculty ratio, students benefit from increased opportunities for personal interaction and more direct contact with their academic advisors, ultimately fostering a more efficient academic environment.
DU has established well-defined study workload parameters for teaching staff, requiring a minimum of 400 hours and capping at 1000 hours per academic year in adherence to the "Procedure for Evaluating the Efficiency of the Scientific Work of the DU Academic Staff." Any workload exceeding this threshold is calculated exclusively for the study activities covered under the academic work contract. All compensation procedures for study workload excess align with the labor laws of the Republic of Latvia.
Furthermore, during interviews with academic staff members, it was disclosed that lecturers may receive additional compensation for offering supplementary lessons and consultations to Erasmus+ international students.
Additionally, as outlined in the interviews and the accompanying annex (1.3_List of Regulations for Internal Quality Assurance.pdf) each faculty member is required to provide annual reports and attain a minimum of two mandatory scholarly publications. Based on the assessment of scientific work efficiency, the Science Department has the authority to recommend to the DU Scientific Council and

Senate a review of the scientific activities within DU's structural units, academic staff remuneration, and suitability for their positions (SAR p. 44).
In discussions with the management, it was revealed that ongoing efforts are in place to balance the distribution of scientific and academic work among the faculty. Upon closer examination of available information, certain noteworthy observations have emerged. Referencing annex (2.4.4.Summary of Quantitative Data_ENG.docx) the number of publications submitted by individual faculty members over the past five years exhibits significant variation, ranging from a minimum of two publications to over sixty-five in the upper range. This diversity raises questions regarding the feasibility of balancing such pronounced scientific disparities with academic responsibilities.
Similarly, during the interview process, it was evident that there is a potential overload of administrative responsibilities for select faculty members. For instance, some individuals hold multiple administrative roles, such as director of a study field and study programme director. Consolidating these roles onto one person poses inherent risks of divided attention and focus, potentially affecting overall performance across all aspects of their work.
It is advisable for the DU management team to thoroughly examine these situations and consider redistributing responsibilities or workloads as necessary to mitigate potential burnout risks and prevent cascading adverse effects on the quality of education provided.

1.3.8. DU provides a large variety of different support mechanisms for its students. Student service center serves as the main interface mechanism for feedback between students and faculty in addition it provides different administrative, career centric and advisory functions (SAR p. 44-45).
DU also offers to local and foreign students living accommodations in DU dormitories (SAR annex 2.3.2. Infrastructure and material and technical provision_EN.docx). During the interviews students expressed satisfaction with quality-of-life level in the provided apartments, their only expressed suggestion was for more options in food preparation and cooking facilities. In addition to living quarters, DU also provides access to health and recreational opportunities.
DU can be highly commended for its various infrastructure adaptations for people with disabilities. Both in the design of rooms and facilities and also by providing specialized equipment and tools for studying. These modifications make the studying environment very inviting and welcoming to people with special needs (SAR p.45).
Overall, DU implements a substantial packet of benefits for betterment of its student wellbeing.

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

DU has identified necessary resources to implement all the study programmes as prescribed by study field requirements. DU is equipped with materials, academic teaching staff and prerequisite administrative management systems. Although there are several points that could be improved, all the fundamental parts are in place, they just need to be refined and improved moving further.

Strengths:
1. Modern, well stocked academic and research facilities.
2. Knowledgeable and highly motivated faculty staff.
3. Well designed and maintained library.
4. Considered actions to accommodate students with special needs.

Weaknesses:
1. Reliance on projects for financing.
2. Possible lack of available compulsory study literature or materials in English language.
3. No defined strategy to entice foreign lecturers.
4. Introduction of the Moodle system is incomplete.

5. For part of the teaching staff English language skills are below level B2

1.4. Scientific Research and Artistic Creation

Analysis

1.4.1. The "Daugavpils University development strategy for 2015.-2020" (has been extended until the start of a new approved strategy (indicatively 2023)) states that DU's top seven biological research areas are as follows: 1. Hydroecology and aquacultures; 2. Forest ecology and biological variety; 3. Animal parasitology; 4. Coleopterology; 5. Nanobiotechnologies and nano biosafety; 6. Molecular ecology; 7. Physiological ecology and behavior.
According to the data gathered, both at DU and in foreign universities, DU instructors and guest lecturers purposefully and frequently engage in a variety of professional development activities in the disciplines that correspond to their scientific interests. Examples of the projects include LIFE projects “Optimising the Governance and Management of the Natura 2000 Protected Areas Network in Latvia” and “Threatened species in Latvia: improved knowledge, capacity, data and awareness”, as well as MAF project “Effects of conservation of different amounts of ecological structures on the sustainable preservation of epixylic and epiphytic lichen species in oligotrophic pine stands in early successional stages. An example of lichens”; the project of the cross-border cooperation programme of Latvia, Lithuania and Belarus "Integrated management and a set of measures to reduce the negative impact of invasive alien species in protected areas in the cross-border region", two ERAF projects “Development of an analytical molecular identification device for the detection of biomolecules based on metal oxide nanostructures” and “Molecular design of novel luminescent compounds for diagnostic purposes”, as some others (Annex 2.4.5.Research projects involving students_EN.docx).
The teaching team has practical expertise in the execution of research projects and contract work connected to the life sciences in addition to their academic work at the DU. This kind of activity helps to develop a thorough awareness of the particulars of the sector, guaranteeing a clear separation between theory and practice throughout the learning process (SAR p. 46).
The directions of the research work of the academic staff involved in the study field are oriented towards the successful implementation of the study programmes and in most cases are related to the lecturer's specialization within the study programmes. In addition to preparing scientific articles for international peer-reviewed journals, lecturers also take part in conferences, practical seminars, training opportunities, internships, and other scientific events. They also publish textbooks, create methodological materials, and work on both international and domestic research projects (SAR p. 46).
The academic staff's research makes a significant contribution to the advancement of the field they represent as well as to the creation of the study programmes and the updating and upgrading of the study materials. For example the greatest collection of beetles in the Baltics is kept at the coleopterological research facility. The world's largest collections in specific taxonomic categories are kept here, particularly for the genera of beetles found in the tropical regions. The research addresses both the theoretical elements and the topicalities and novelties of the disciplines that are employed in the lecturers' study courses, fostering interaction between the research and study process and greatly enhancing the caliber of the learning experience. The involvement of students as listeners in scientific and practical conferences and seminars is also continually encouraged (SAR p. 46).
The "Biology" doctoral study programme at Daugavpils University is a key contributor to the advancement of the scientific capacity of the common field of study and to the development and renewal of the academic workforce. The teaching personnel that are tasked with carrying out the DSP "Biology" supply a sizable portion of the scientific indicators of the DU research programme "Biology" (publications, scientific projects, etc.). The students of ABSP "Biology" and AMSP "Biology"

may also take part in existing research projects as part of the production of doctorate theses created by DU, obtaining a distinctive perspective on research activities (SAR p. 47).
The majority of the academic staff working on the DSP "Biology" implementation are also working on the ABSP "Biology" and AMSP "Biology" study programmes, ensuring knowledge continuity and the best possible connections between the study content in the various level study programmes being implemented by DU. See section 3.2.2 of the analysis report for more information on the impact of DSP "Biology" on research and other educational levels (SAR p. 47).
It is noteworthy to say that some teaching staff have high relevance in their fields of research, and strongly contribute to the scientific research of the study field, such as researchers in the field of coleopterology, animal parasitology and forest ecology. Except for some excellent research contributions to the study field, of few teaching staff, some of the staff is not involved in any of the scientific projects and has very low contribution to the scientific and research activities. This disbalance should be maintained. The scientific research is strongly focused on the topics related to nature conservation, biodiversity and field work topics, which is a strength at the level of AMSP and doctoral studies, but on ABSP level, students should have more opportunities to develop their talents and have more opportunities to work on the topics related more to biological sciences connected with laboratory work.

1.4.2. The research programme specified in the DU strategy in the priority research direction "Biology" is strongly tied to how the study programmes of the study field "Wildlife Sciences" are realized. The establishment of an innovative atmosphere at DU and the incorporation of scientific advancements into the learning process are two of the priority research direction "Biology" most crucial tasks (SAR p. 47).
The academic staff participates in projects, and the outcomes are utilized to enhance the content of the study courses. As part of the study process, the most recent current events in the field are continuously tracked. By giving presentations at scientific and practical conferences and seminars, lecturers actively contribute to the approval and dissemination of the study findings. The data gathered at scientific conferences is utilized to organize study programmes and assignments, as well as to create instructional materials. The academic staff's research and creative endeavors are directly tied to the learning process and help students better grasp how the demands of actual organizations and the innovation sector are related (SAR p. 47). Throughout the reporting period, the academic staff actively participated in a total of 35 scientific and applied projects. For example, one of the senior researchers is currently supervising (PI) the project “Estonian Science Agency Project PUT1223 “Where does personality come from? Characterizing the Development and The first project is titled "Adaptive Value of Phenotypic Variation in Variable Environments." The second project is "IUT36-2: Sustainable crop protection: using ecosystem services for crop production" in Estonia. According to the collected data and on-site meetings, the academic staff and visiting lecturers actively participate in professional development activities related to their scientific careers and interests. These activities include scientific seminars, international conferences, workshops, and short scholarships at both domestic and foreign universities. In addition to their academic work at the university, the academic staff possesses practical experience in implementing industry projects and contract work. For instance, they have undertaken contract work for Latvian State Forests, developing a reconstruction plan for the Skriveri Arboretum. They have also worked with the Nature Conservation Agency, conducting monitoring of invertebrates, amphibians, and reptiles. Furthermore, they have collaborated with the Institute of Agrarian Economics, conducting research on beetles (SAR, p. 105-109). Engaging in this type of activity contributes to a thorough grasp of the industry's unique characteristics. It ensures that theory and practice are directly integrated into the study process, promoting a comprehensive understanding.
It is noteworthy to say that some disciplines in biology are very well developed, research related to biodiversity conservation, especially focused on coleoptera and botany. However it would be

important to develop other disciplines in biology to give students more opportunities to find their interests and develop their talents.

1.4.3. Academic staff are implementing many international basic and applied research projects (including Horizon 2020, LIFE, Twinning, COSME, etc.). They also participate in international networks and scientific consortiums (CERN, CETAF, GBIF, etc.) and publish the results of their research in journals indexed in the Scopus database (SAR p.58). It is worth adding that students of all levels of fields carry out various activities as part of international cooperation. In addition, DU is included in international scientific networks, where DU has access to different specialized databases (e.g. PlutoF Biodiversity Platform), to which people studying in the field also have free access.
It should be mentioned that the results of this international collaboration is reflected in some of the researchers who are highly productive, while there is a disbalance compared to others, who are less active or inactive. Some of the teaching staff, around 30%, is not involved in international projects in the field of scientific research.
The "ERASMUS +" programme promotes teaching through enabling DU teachers to visit one of the foreign partner universities or take part in staff training, thereby enhancing their professional skills, ensuring attendance at training sessions, and gaining firsthand experience working at a foreign partner DU or another suitable institution. According to the data presented, only around 10% of teaching staff is using these opportunities, and this could be seized better by the teaching staff (SAR annex 2.5.3.Incoming and outgoing mobility academic staff_EN.docx).

1.4.4. The competencies of DU academic staff are developed through participation in field trips under the European Union support programme in education, training, youth and sport "ERASMUS +". Cooperation agreements have been concluded with over 90 universities in 22 countries (SER, p. 58).
Plans were also created to develop cooperation in scientific research, including:

1. increasing the scientific potential of teaching staff by increasing participation in international projects and conferences;
2. increasing the number of international cooperation agreements concluded in the area of education and research;
3. increasing the number of publications in journals indexed in the Scopus database.

The DU has developed mechanisms for the involvement of the teaching staff in scientific research (for example, there is a motivation system for the academic staff, that cascads science performance indicators to level of individual researcher (SAR, p.49)), however, some of the teaching staff had not fulfilled requirements prescribed (not all teaching staff members have at least one publication, SAR Annex 2.3.7.CV of academic staff_EN), therefore it is evident that the system is not functioning well and is not fully efficient.

1.4.5. Students of all three levels of the study programmes conduct research in very well-equipped research laboratories both at DU and in partner research institutions. Providing research laboratories to institutions outside DU is part of the promotional package addressed to students. In situations where students show interest in research areas that are not implemented in structural units profiling the study of the field, individual solutions are sought by signing an enterprise agreement with science advisors/consultants of semester, bachelor's, master's or doctoral theses from other scientific institutions in Latvia or abroad.
Undergraduate and graduate students at the DU can apply to the annual student research project competition. The primary goal is to improve students' skills in developing research projects and preparing publications. An additional goal is to promote the field. Students are involved in the scientific projects of the academic staff, for example, ES Cosme programme project

“TastyCheeseTour”, VPP project “The impact of changes in social awareness on the sustainable provision of ecosystem services”, LIFE project “Optimising the Governance and Management of the Natura 2000 Protected Areas Network in Latvia” (SAR Annex 2.4.5.Research projects involving students_EN.docx). Students' involvement in scientific research is shown also by their participation in scientific conferences as main or co-authors of presentations, mainly at the International Scientific Conference of Daugavpils University (SAR Annex 2.4.5_Student participation in conferences_EN.docx).

1.4.6. The Directorate of Academic Affairs at DU identifies degree programmes that are already being taught or are to be taught in English, carefully designed to complement the University's dynamic research strategy. This thoughtful synthesis is not merely a reinforcement of academic integrity but a decisive step towards keeping pedagogical innovations in synergy with current research (SAR p. 51-52).
The excellent units of the Faculty of Natural Sciences and Mathematics, the Institute of Natural Sciences and Technology and the Latvian Institute of Hydroecology of the DU are at the epicentre of this academic-research connection. These institutions have advanced laboratories and research equipment designed to provide a rigorous scientific atmosphere, seamlessly integrating theoretical knowledge with empirical research.
The University's engagement strategy to generate interest in research-oriented academic programmes is multifaceted. Valued initiatives such as Open Days, Scientists' Night, DU Science Festival and School of Green Biologists are just channels through which DU enhances and promotes its research. Additionally, the University's commitment to sharing scientific knowledge is demonstrated by mentorship to high school students undertaking scientific research, thus sowing the seeds for future innovation.
Reaffirming its commitment to innovation, DU has adopted advanced digital systems to improve the operational efficiency of administrative and academic processes. The basis for this digital transformation is the DUIS and Namejs systems, which ensure efficient management of the University's scientific and research documentation. The DU e-studies platform is a role model for digital academia, offering a comprehensive range of support services needed to facilitate research. These include, among others, consulting services, access to extensive e-learning resources and an online cooperation platform. These facilities are essential to researchers and require a robust support system to effectively manage the complexities of digital learning and online collaboration. Efficient IT systems at DU undoubtedly increase the effectiveness of communication in scientific research.
In summary, DU's strategic priorities in integrating educational programmes with research are reflected in its advanced infrastructure, strategic promotional initiatives and cutting-edge digital support systems. Together, these elements strengthen DU's activities in both teaching and research, creating effective bridges between these activities.

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

In general, it can be said that the directions of scientific research correspond to the development goals of the university and are important for the field of study and the industry. The connection of scientific research with the study process is logical and justified, and its results are included in the study process in study programmes at all levels. International cooperation is ensured and developed.
DU has also developed mechanisms for involving teaching staff in scientific research. Mechanisms promoting student involvement in research are efficient and effective. The field of study uses innovative solutions that have a significantly positive impact on the study process.
We pay attention to the fact that both planned (bachelor, PhD) and existing (MSc) English-taught

study programmes' visibility and promotional efforts require augmentation to effectively penetrate the international market and attract a diverse cohort of international students. An enhancement of marketing strategy is paramount to solidify international standing.
Moreover, a considerable segment of the academic faculty, approximately 30%, remains uninvolved in international research activities. The institution must take decisive action to facilitate and increase faculty engagement in such scholarly activities, indispensable for sustaining our competitive advantage and cultivating an innovative academic milieu.
Current faculty participation in international mobility programmes is suboptimal, with only 10-30% active involvement noted. It is essential to escalate this participation, as it is instrumental in fostering an exchange of scholarly insights and pedagogical methodologies, thereby enhancing the caliber of our academic offerings and the educational journey of our scholars.
In conclusion, the strategic expansion of academic disciplines within the biological sciences cannot be overstated. By introducing a more varied suite of specialisations, they are committed to providing scholars with a broadened educational spectrum, thereby facilitating the exploration and refinement of their academic and professional pursuits.

Strengths:
1. Active participation of staff in international research initiatives (scientific networks, projects, scientific publications
2. Possibility to apply for research funding from DU funds.
3. Certain areas of biology, particularly biodiversity conservation with a specific focus on coleoptera and botany, have witnessed significant advancements.

Weaknesses:
1. Some of the teaching staff, around 30%, are not involved in international projects in the field of scientific research, which should be changed.
2. Not all members of the academic staff has scientific publications in the evaluation period
3. Only around 10-30% of teaching staff is involved in mobility programme, which should be changed.

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: Partially compliant

The study profile was found to be highly consistent with the direction of the research being conducted. However, around 30% of teaching staff are not involved in international projects in the field of scientific research. Only around 10-30% of teaching staff is involved in mobility programme. Also not all of the teaching staff members have scientific publications.

1.5. Cooperation and Internationalisation

Analysis

1.5.1. Within the context of the study field, the DU has been established a partnership and regular communication is held with state and local organizations that represent business, scientific organizations, other higher education institutions, entrepreneurs, and various professional associations and unions as part of the implementation of the study programmes included in the "Wildlife Sciences" study field. The collaborators include University of Latvia, Latvia University of Life Sciences and Technology, Rēzekne Academy of Technology, Riga Stradiņš University, Vidzeme

University, Confederation of Latvian Employers, Nature Protection Board, Regional Environmental Board, Daugavpils Regional Hospital, State Border Inspection, Food and Veterinary Services, Latgale Zoo, Regional Education Boards and schools, Daugavpils City Council, Daugavpils Regional Council, Līvāni Regional Council, Rural Support Service, VAS “Latvijas valsts meži”, Forest Certification Council, State Scientific Institute “BIOR”, Latvian State Institute of Forestry Science “Silava”, Latvian Institute of Hydroecology, Institute of Agrarian Resource Economics, “Estonian, Latvian & Lithuanian Environment ltd, “Magistr” ltd, “EkoLat” ltd, “VetZooCentrs” ltd, “ROLS” ltd, etc.) (SAR p. 53, Annex 2.5.1.Cooperation partners_EN.docx). As the list presents all of the collaborations that the DU has, it is evident that most of the collaborators are directly involved in the work or research activities related to life sciences.

When modifying the selection and content of study courses, as well as when creating new AMSP "Biology," the opinions of cooperation partners are taken into consideration. The council of the DU study field "Wildlife Sciences" can be mentioned as an effective forum for communication with current and potential cooperation partners and, if necessary, offers consultations with partners on issues related to the implementation of study programmes and improvement of the study field. The relationship between a company's or institution's areas of activity and the field of biology and/or the possible employment market for study programme graduates is the most crucial factor when identifying potential collaboration partners on a regional or national level for Latvia (SAR p. 53).

The study field's study programmes' material is established and modified while taking into account the preferences and demands of employers. Over a number of years, the expansion of the knowledge base and innovative resources in the field of natural sciences has been accomplished with the assistance of employers' and professional organizations' partners. Employer cooperation is continually improving and growing, and so are the forms of employer cooperation. Improvement of study programmes and study courses, taking into account suggestions from employers regarding the content of study courses and methods of their implementation; participation in shared activities, such as organizing scientific and practical conferences, science communication events, etc.; and employment of students and graduates in companies or scientific institutions (SAR p. 52).

Employers are involved in consulting on the knowledge and skills that employees will require, evaluating the quality of educational programmes, and strategic planning when putting study programmes into practice. The cooperation of DU with Latgale region employers, regional and city governments, as well as state and local government organizations, plays a significant role in the regional dialogue. As a result, the programmes ensure that one of the fundamental tenets of regional development policy is partnership (SAR p. 52).

Employer representatives participate in the work of the study field council and help to resolve a number of significant problems linked to the formulation and implementation of the study programme. A regular survey of companies is conducted to ensure that the study programme complies with the demands of the job market. Employers and graduates have both received questionnaires. The opinions and input of employers regarding graduates are significant since they can help to introduce certain changes to the way that academic study programmes are implemented. In order to ensure feedback in collaboration with graduates and employers, the survey data are examined and debated at meetings of the structural units participating in the study programmes, at meetings of the study field council, and at meetings of the Faculty Council. Cooperation between lecturers and other professional organisations and unions is also crucial in order to attain the objectives and study outcomes of the study field (SAR p. 52).

Within the context of the study field, DU collaborates with numerous organizations in Latvia that includes higher education institutions, employers, employers' organizations, municipalities, non-governmental organizations, scientific institutes, etc., and this collaboration helps to realize the objectives and learning outcomes of the study field. DU's involvement in international initiatives and framework programmes, among other things, ensures the expansion of its interaction with other academic and scientific organizations. Except for contracts within the context of initiatives carried

out by DU, the majority of cooperation agreements with other academic and scientific organizations are ongoing. However, even the relevant study programmes and the unique characteristics of the study field are taken into consideration while choosing the collaboration partners, regarding the disciplines related to field work, biodiversity and conservation, more collaboration is needed in the disciplines related to laboratory work, biochemistry and molecular biology, such as the institutes of Scientific Institute of Food Safety, Animal Health and Environment “BIOR”; “UL Institute of Biology, the UL Institute of Microbiology and Biotechnology” and “Latvian Biomedical Research and Study Centre”.

1.5.2. Within the context of the study field, the higher education institution collaborates with foreign institutions, and this collaboration helps to achieve the objectives and learning outcomes of the study field and the pertinent study programmes. By joining various international scientific networks focused on the biological sciences during the reporting period, DU greatly increased its reputation abroad. In the international networks of CETAF (Consortium of European Taxonomic Facilities) and GBIF (Global Biodiversity Information Facility), DU has been accepted as an associate member since 2021. The mentioned networks give DU researchers and students more access to scientific collections and databases in Europe and other parts of the world, as well as the opportunity to expand DU's current collections by enlisting the help of international experts in the execution of taxonomic audits (SAR p. 53).
DU is a part of the NACEE (Network of Aquaculture Centers in Central-Eastern Europe) network, which was established with the intention of advancing aquaculture research and industry growth in Central and Eastern Europe, making it a significant contributor to the European research community (SAR p. 53).
There is also collaboration on the intercontinental level with The Philippine Coleopterological Network (PhilColNet), an international network for the study of the beetle fauna of the Philippine archipelago, which was founded with the goal of promoting biodiversity research in the Philippine archipelago and ensuring the preservation and protection of the region's distinctive natural diversity. DU is one of the network's founders and participants (SAR p. 53).
The Baltic group of the European Organization for Nuclear Research (CERN) has accepted DU as a member since 2022. Despite the fact that the study programmes covered by the area of study are not directly related to the research done by CERN, membership in CERN offers up several chances for the research staff and students of the life sciences field to participate in the multidisciplinary research done by CERN (SAR p. 54).
The academic staff of DU's "Wildlife Sciences'' study area participates in numerous international projects that are carried out in collaboration with other scientific institutions abroad. DU is a project partner in the implementation of the Horizon 2020 programme projects OPTAIN and BETTER Life, as well as in the implementation of projects supported by other EC financial instruments (such as the TWINNING, LIFE, and other programmes) as well (SAR p. 54).
More than 90 institutions of higher education (from 22 different countries around the world) have signed cooperation agreements with DU, making it feasible for students and faculty to complete internships there and create research subjects. Around 10 -30% teaching staff is using the possibility of mobility, and usually it includes universities and research institutes in the neighboring countries, like Lithuania and Estonia, as well as other European countries (SAR p. 54).
The DU Erasmus+ coordinator sends a promotional letter about how foreign students and teaching staff can apply for studies, internships, teaching, or professional development to all current Erasmus+ partners at the beginning of the year in order to promote the incoming mobility of those individuals. The profiled structural units are contacted for a list of the available study courses. Every year, the list of study courses is updated. Several times a year, the DU Erasmus+ coordinator also attends the international Staff Week, where there is a chance to make new connections and finalize agreements between universities for the exchange of students and faculty under the Erasmus+

programme. Priority is given to universities that run comparable study programmes in the life sciences or scientific institutions whose research directions align with the priority research directions outlined in the DU strategy when choosing potential cooperation partners in Latvia and abroad within the field of study. This includes Latvia University of Life Sciences and Technologies; Liepāja University; University of Latvia; Rīga Stradiņš University; Rīga Technical University; DU agency “Latvian Institute of Hydroeceology”; Latvia State Forestry Institute “Silava”, Scientific Institute of Food Safety, Animal Health and Environment “BIOR”, University of Mindanao, Philippines; Jan Kochanowski University, Kielce, Poland; Warsaw University of Life Sciences, Poland; Wroclaw University of Environmental and Life Sciences, Poland. See the annex for details on agreements reached for cooperation with international institutions (SAR p. 54).
Successful individual cooperation of DU scientific staff with researchers from other scientific institutions has been very important in the recognition and promotion of the international cooperation of the study field “Wildlife Sciences”. Numerous research projects have been completed, and the findings of those projects have been published in internationally indexed scientific publications, thanks to long-term relationships and initiatives in the implementation of cooperative research. The majority of the scientific articles that the academic staff of the "Wildlife Sciences" study field publishes are co-authored by researchers from academic institutions abroad. (SAR p. 54).
The DU collaborates with foreign institutions, and this collaboration helps to realize the objectives and learning outcomes of the study field and the study programmes. It is evident that the unique characteristics of the study field are taken into consideration while choosing the collaboration partners. However, the disbalance between the disciplines is obvious. Even tho there are strong collaborations in the field of so called “green biology” related more to field work, biodiversity and conservation, there is less collaboration and partnerships in the disciplines related to the fields of “white biology” meaning the disciplines related to biochemistry, molecular biology and other disciplines related more to laboratory work. There are some challenges related to mobility as there is still comparatively low engagement in international exchange programmes from students and teaching staff. The reason may be the insufficient command of a foreign language; that should be improved, especially for teaching staff. There is a good basis for the study field“Wildlife Sciences”, that is expected to be better exploited for future professional and academic work, such as potential of cooperation with foreign universities for the implementation of student and academic staff exchange programmes, joint scientific research projects, continuing the signing of cooperation agreements. Emphasis should be also placed on the internationalization of the field of study, foreseeing ERASMUS+ mobility, concluding cooperation agreements with foreign partner institutions, creating international research groups, etc. This could help in overcoming the challenge of attracting students, incl. students from abroad.

1.5.3. More than 90 higher education institutions from 22 countries have signed cooperation agreements with DU through the "ERASMUS+" programme. The "ERASMUS+" programme promotes academic exchange by allowing DU lecturers to visit one of the partner foreign universities or take part in staff training, which helps them advance their professional skills and ensures their participation in training sessions as well as work placements at partner foreign universities or other pertinent institutions. Academic staff outgoing mobility ranged from 3 -12 academic staff per year, while incoming mobility ranged 3-4 academic staff per year in the assessment period. This represents 10 - 30% of teaching staff in outgoing mobility, and only around 10% of incomcing mobitliy. The goal of academic mobility gives DU academic and general staff the chance to learn from the experience and best practices of foreign partners, as well as to improve the practical skills necessary for work at DU and professional development. They also encourage the academic staff to expand and improve the range and content of the study courses offered, and they give students who would otherwise be unable to participate in the mobility programmes the chance to do so (SAR

p. 55).
Students from DU and international students actively use the study and internship opportunities provided by the Erasmus+ programme. As evident from the site visit and from the statistical data provided (SAR p. 55; Annexes 2.5.3.Statistics on foreign students and lecturers_EN.docx; 2.5.3.Incoming and outgoing mobility DU students_EN.docx; 2.5.3.Incoming and outgoing mobility academic staff_EN.docx). The incoming and outgoing mobility are well developed and used. Between 4-28 students are involved in incoming mobility, while 5-8 are involved in outgoing mobility. The Erasmus+ (KA107) programme provides chances for staff and students from countries that do not belong to the Erasmus+ programme, to actively participate in mobility. DU provides partner universities in the United States, the Philippines, India, Israel, Jamaica, China, Lesotho, and Tajikistan with exchange opportunities. As one of the positive aspects of studying at DU, from students' side expressed, was the number and variety of mobility opportunities they can use (SAR p. 56).
In order to draw in international applicants, DU makes information about the study programmes it offers available in English on its website and other online resources. Additionally, DU engages in marketing initiatives, including: e-marketing, participation in international school fairs, agency forums, and contracts with recruitment agents (SAR p. 56, https://du.lv/en/news/apply-for-erasmus-studies-and-traineeship-scholarship/; https://du.lv/en/studies/study-programmes/; https://www.studyinlatvia.lv/universities/daugavpils-university, https://www.study.eu/university/daugavpils-university).
It is clear and evident that the DU has made an effort to attract foreign students but, available information does not show any current directions to recruit foreign faculty members in the study field. Recruitment rules are currently limited to the local and national levels (SAR, pp. 40–41), making it unlikely that any interested parties abroad will find out. Participation in both outbound and incoming mobility by academic personnel and students adds to the effectiveness of the study process and the caliber of studies.
However, there are some challenges regarding the mobility that relates to the insufficient recognizability among study programmes in biology taught in the EU. Students have insufficient command of foreign languages and insufficient participation in international projects. Part of the academic staff have insufficient command of foreign languages that reduces the potential of the study field in involving foreign students.

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

Within the context of the study field, the DU collaborates with numerous organizations in Latvia that includes higher education institutions, employers, employers' organizations, municipalities, non-governmental organizations, scientific institutes, etc., and this collaboration helps to realize the objectives and learning outcomes of the study field. DU's involvement in international initiatives and framework programmes, among other things, ensures the expansion of its interaction with other academic and scientific organizations. Except for contracts within the context of initiatives carried out by DU, the majority of cooperation agreements with other academic and scientific organizations are ongoing. There are some challenges regarding the mobility that relates to the insufficient recognizability among study programmes in biology taught in the EU. Part of the academic staff have insufficient command of foreign languages that reduces the potential of the study field in involving foreign students. Students have insufficient command of foreign languages and insufficient participation in international projects.

Strengths:
1. Within the context of the study field, the DU collaborates with numerous organizations from Latvia

and abroad.
2. More than 90 higher education institutions from 22 countries have signed cooperation agreements with DU.
3. "ERASMUS+" programme is well developed for use by teaching staff and students.
4. Collaborations related to the disciplines related to field work, biodiversity and conservation are strongly supported.

Weaknesses:
1. More collaboration is needed in the disciplines related to laboratory work, biochemistry and molecular biology.
2. Part of the academic staff have insufficient command of foreign languages that reduces the potential of the study field in involving foreign students.
3. Students have insufficient command of foreign languages and insufficient participation in international projects.
4. Very low engagement in international exchange programmes from students and teaching staff.

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

Within the context of the study field, the DU collaborates with foreign institutions, and this collaboration helps to achieve the objectives and learning outcomes of the study field and the pertinent study programmes.
SAR Annexes:
2.5.1.Cooperation partners_EN.docx; 2.5.3.Statistics on foreign students and lecturers_EN.docx; 2.5.3.Incoming and outgoing mobility DU students_EN.docx; 2.5.3.Incoming and outgoing mobility academic staff_EN.docx

https://du.lv/en/news/apply-for-erasmus-studies-and-traineeship-scholarship/%20;%20,
https://du.lv/en/studies/study-programmes/%20,
https://www.study%20in%20latvia.lv/universities/daugavpils-university,%20,
https://www.study.eu/university/daugavpils-university).

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

Analysis

1.6.1. DU received four recommendations in the previous accreditation (in 2011), but in 2021, after the licensing of the master's study programme, they received seven recommendations. Three of the recommendations made in the framework of the accreditation by DU are considered to have been fulfilled or substantially fulfilled, one can be considered as not fulfilled or partially fulfilled. Similar situation is with recommendations from the process of licensing master’s programme - recommendations are implemented partly.
Two of the recommendations after previous accreditation were related to scientific specialization, calling on DU to focus on the further development of specific research directions that do not overlap with research directions elsewhere in Latvia and to create an international center of excellence in coleopterology. During the past years DU has concentrated on particular research areas - coleopterology, parasitology, nanobiotechnology, biodiversity and forest ecology. DU well

understands its strength in these areas and tends to specialize, however, this is uneven across research fields and is certainly partly due to the success of different projects and hence the funding available for research. DU has created Centre for Koleopterological Research in Study and Research Center "Ilgas" (https://du.lv/en/research/institutes/institute-of-life-sciences-and-technologies/structure/department-of-biosystematics/the-coleopterological-research-center/). They have developed close cooperation in the field of coleopterology with the University of Mindanao in the Philippines and Philippine Coleopterological Network, but collaborations should be expanded also with other research institutions abroad. More detailed analysis about scientific research in chapter 1.4.

After previous accreditation, DU also received recommendation to implement study programmes for qualification as a teacher, it is fulfilled, but this suggestion seems a bit irrelevant for this study field at the moment. Another recommendation for the study field was to increase the number of students enrolled each year in the bachelor's study programme to 50-80 to make learning more effective. According to the documents provided by DU (SAR Annex 3.1.4.), the number of students has not increased (with around 15 students enrolled each year), possibly there is even a slight downward trend, and the drop-out rate is very high. In 2022 only two students graduated bachelor's study programme, in 2021 there were 8 students. Of course, Latvia has a negative demographic situation, which should be taken into account, but STEM students are in demand on the labor market and DU certainly has the opportunity to attract more students and take steps to reduce the drop-out rate. It is not easy to understand how DU keeps up with an effective and financially secured study process with such a low number of students. DU plans to implement study programmes in English and attract students from abroad, but no clear plan has been developed on how to achieve this (to create a marketing plan for the study programme was also recommended during master's programme licensing). In conclusion, this recommendation cannot be considered to have been met. A similar recommendation was made during the licensing process, i.e. to work on increasing the number of matriculated students, including international students, by developing a student attraction strategy for the study programme that includes planned activities. This recommendation is also not considered to have been implemented and is covered by the points analyzed above. Only two to three students graduated from the master's study programme in the last years (SAR Annex 3.1.4.).

During the licensing process the master's study programme received some recommendations, connected with realization of the study process. The lecturers needed to strengthen their English language skills and thanks to the European Social Fund project No 8.2.2.0/18/A/022, which was implemented in several Latvian higher education institutions, this recommendation can be considered as fulfilled. However, some academic staff still need to improve their English language skills. Lecturers also needed to develop their digital skills in seminars etc, because recommendation "A proper motivation system oriented towards learning topics suitable for the digital environment could help to develop methodological materials more smoothly" was received, but it seems that attending courses and seminars has not helped the implementation of digital skills in the daily study process, as both students and lecturers admitted during the discussions, innovative digital solutions are not used in the study process. For example, during COVID-19 crisis no digital solutions were found for practical works, now students have no remote lectures or recordings, also no tests or self-assessment tests are available online. So, this recommendation has not been implemented. Also suggestions to have more guest lecturers, including through the now readily available remote lectures, were made and have not been done. Documents provided (SAR Annex 2.5.3.) and students during the site visit confirmed that the amount of guest lecturers/actual lectures has not increased and there is a place for improvement.

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

It seems that DU does not have a clear system for developing and monitoring the study process, i.e. improvement measures are mostly isolated, sporadic events. Current state is underutilized and should be improved for better results, including motivating students and academic staff for more engaged feedback. This has implications for the implementation of the recommendations from previous accreditation and licensing - some have been implemented (improving teachers' English language skills, specialization in certain scientific fields, keeping of the teacher programme), but a significant number have not been implemented in a substantive way. DU has not been able to increase the number of students, it seems that it has even dropped, there is no clear plan for promoting study programmes abroad and how to increase the number of graduates, especially for bachelors and masters study programmes. Also the number of guest lecturers has not increased and no new digital methods have been introduced in the study process.

Strengths:
1. DU is aware of its strong scientific fields and tends to develop them;
2. English language skills for the academic staff in general seems to be improved.

Weaknesses:
1. Study field has no efficient working system on how to improve and implement recommendations, creating a situation where they can be implemented "on paper", but not in substance;
2. Study field hasn’t increased number of students and graduates, it is dramatically low;
3. Study process should be improved and diversified by more guest lectures, digital solutions and fresh teaching methods.

Assessment of the requirement [4]

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

Assessment of compliance: Partially compliant

University has implemented some of the received recommendations, but a significant part of them has not been implemented in essence.

1.7. Recommendations for the Study Field

Short-term recommendations

1) Before the implementation of the study programmes in English, implement a comprehensive language proficiency enhancement programme for academic staff, with a clear focus on the acquisition of necessary foreign language skills, aiming to increase the study field's appeal to foreign students.
2) Before the implementation of the study programmes in English, adapt the content of the study programmes to make them interesting and relevant for the foreign students.
3) Within two years develop a strategy for increasing the number of students and decreasing the drop-out rate.

Long-term recommendations

1) Implement a long-term, systematic approach for developing teaching staff methodological skills to ensure consistency and effectiveness in educational activities, during the next accreditation period.
2) Enhance the feedback process for teaching staff by ensuring it is transparent, balanced with both constructive criticism and positive feedback, and establish clear guidelines for delivering and receiving feedback during the next accreditation period.
3) Implement targeted student motivation activities or other measures, to increase participation in feedback surveys, setting measurable goals for survey completion rates, and conducting regular assessments to track progress, during the next accreditation period.
4) Maximize the utilization of the E-platform by implementing comprehensive training programmes for staff and regularly evaluating its effectiveness, aiming for increased usage and measurable improvements in online resources access and student engagement, during the next accreditation period.
5) Enhance interdisciplinary collaboration, particularly in laboratory work, biochemistry, and molecular biology, by implementing a structured joint research and project-based approach that promotes the exchange of knowledge and expertise among faculty members, with the goal of measurable improvements in research outcomes and educational quality within the next accreditation period.
6) Develop and implement activities for students, where they can enhance their foreign language skills and facilitate their active involvement in international projects within the next accreditation period.
7) Implement an outreach programme to promote and encourage student and teaching staff participation in international exchange programmes, setting clear participation targets for the next accreditation period, and regularly assessing progress towards these goals.
8) Encourage and support teaching staff's active involvement in international scientific research projects, setting a specific target such as higher number of international projects, for the next accreditation period.
9) Implement clear conflict of interest policies and limits on multiple positions held by the same academic staff, ensuring transparency and accountability, within a 3 year period.
10) Within a 3 year period make changes to the development plan to add measurable targets and specific goals to assess the feasibility and effectiveness of a management plan. This will provide a clearer understanding of the expected outcomes, enhance transparency, and facilitate effective progress monitoring.
11) Systematically work with the Ministry of Education and Science to come to the solution that decreases reliance on the project financing for DU development (during the next accreditation period).
12) Develop strategy for attracting foreign (visiting) lectures and ensure guest lectures for students and academic staff on a regular basis (several times per academic year) to DU during the next accreditation period.
13) Introduce application of Moodle system in teaching process in more intensive way in the next accreditation period.

14) Implement an outreach programme with potential employers where they can possibly read guest lectures or generally interest students in their industry specifics. That could give students a better understanding of their career opportunities and professional areas where they apply their academic skills, during next accreditation period.
15) During the next accreditation period systematically increase the number of the literature available in the English language.

II - "Biology" ASSESSMENT

II - "Biology" ASSESSMENT

2.1. Indicators Describing the Study Programme

Analysis

2.1.1. Academic bachelor study programme “Biology” (code 43421), its aims (to provide students with theoretical knowledge and research skills in the field of biology), tasks (provide basis for professional activity, provide theoretical and practical knowledge in biology, to deepen understanding of the biology role) and results to be achieved (for example theoretical and practical knowledge of biology, knowledge of the biological scientific research, skills to select and analyze information, skills to conduct scientific research) (SAR, p. 61-62) fully complies with the study field “Wildlife Sciences”.
The purpose and goals of the study programme, which are in line with the most recent developments in the EU's educational system, with relevant Cabinet of Ministers regulations (No 240, 13.05.2014.), with the DU Constitution, and with DU's top research priorities, determine the content of ABSP "Biology." Students who enroll in the biology bachelor's degree study programme gain a foundational knowledge base in the subject, develop their abilities by learning broad techniques for carrying out laboratory and field work, and develop the competences required for professional participation in the discipline (SAR p. 70).

Characteristics of the Study Programme.
The goal of the study programme is to guarantee that matriculated students at DU to obtain top-notch theoretical knowledge, research abilities, and skills in the field of biology, as well as theoretical and practical training that satisfies state needs and provides the opportunity to successfully engage in problem-solving for the economy, compete on the Latvian and international labor markets, and pursue further professional and academic education (SAR p. 70).
Results of the study programme to be achieved: during the bachelor study programme, students will acquire a general knowledge base in the field of biology, develop their skills by learning general techniques for conducting laboratory and field work, and develop the competences required for professional activity in the field of biology (SAR p. 70).

Knowledge: The study plan aims to provide students with the theoretical and applied knowledge in biology and its subfields that make up the body of knowledge needed to earn a bachelor's degree in biology. Students will be able to demonstrate an understanding of the fundamental rules governing the functioning and development of biological systems at all levels of the life organization, as well as the current local and global issues in the field of biology and potential solutions, upon successful completion of the study programme and mastery of the study courses' content.
* Demonstrate an extensive knowledge of biology, both theoretically and practically;
* Has a basic biological understanding of how biological systems function and grow;
* Be familiar with the fundamental principles of biological research (SAR p. 71).

Skills: Students acquire academic and professional competences throughout their study programme, which is represented in their skills. Students learn different research methods, how to plan and carry out laboratory, experimental, and instrumental research, as well as how to make observations in nature by taking part in the practical and laboratory work, field practices, and research that are required in the study programme. The capacity to do statistical analysis of data and their interpretation, the capacity to present and publicly defend one's research findings, etc., is crucial within the framework of the curriculum. The learned skills guarantee that students will be able to meet the demands of the labor market in the chosen industry and will be able to further their education in the future by honing their learned abilities and specializing (SAR p. 71).
* May freely choose, critically assess, and analyze the information acquired;
* Can independently undertake biological science-related research.
* Can publicly present and defend his research's findings.

Competencies: Without collaboration with the academic staff and other students involved in the programme's implementation, as well as without looking into the issues of sustainable rational use of biological resources, students' academic and research activity in fulfilling the requirements of the bachelor study programme will not be successful. By strengthening general human attitudes and clarifying attitudes pertaining to biological science, awareness and comprehension of nature protection and conservation are created.
* The ability to take initiative and responsibility while working alone or with a team;
* The capacity to apply knowledge of linked biological subjects to one's own self-improvement and future professional career;
* Capable of enhancing common human attitudes while also elucidating attitudes regarding biological sciences, fostering knowledge and comprehension of the preservation and conservation of nature (SAR p. 70 -71).

Opportunities for further education include study programmes at DU's Master's level in Biology, Environmental planning, Management of society and institutions, and Educational sciences (by earning a teaching credential in the natural sciences).
Basic guidelines and methods for acquiring and evaluating the study programme: The acquisition and evaluation of the study programme adheres to the following principles:
* the idea of transparency;
* the obligation principle;
*the evaluation review option principle;
* the idea of variety in the tests that are employed.

More than 80% of the compulsory study courses belong to the field of biology (SAR annex 3.2.1. ABSP Biology_study plan_ENG.xlsx), thus experts conclude that the study programme is compliant with the study field “Wildlife Sciences”.

2.1.2. The title, code (43421 - biology), degree (Bachelor of Natural Sciences in Biology) to be obtained from the ABSP “Biology‘ are in accordance with the normative regulations. Aims, objectives and learning outcomes of the study programme seems relevant, however, some of them overlap with the Biology master's study programme and should be revised to specify differences in gained knowledge between these programmes. Learning outcomes (for example, knowledge of biology an basic principles of scientific research in biology, can do research in the field) are directly interrelated with the degree, title and code of the programme.
Admissions requirements - secondary education, admission rules for internal contest - centralized exams (CE) in Latvian language and literature and first foreign language, CE in Mathematics, additional points will be awarded for CE in Biology, CE in Chemistry, as well as DU Science School

Certificate winners (SAR 3.1., https://du.lv/en/studies/study-programmes/academic-bachelors-study-programmes/biology/). DU has a plan to implement a study programme in English, admission requirements for those studying in English: a document certifying secondary education and a document certifying knowledge of the English language at least at the B2 level. While it is understandable that this would increase the number of potential students who might enroll, consideration should be given to including a biology exam as part of the entry requirements, including for the study programme in English. Also, additional points could be given for the CE in Physics, as this field is closely related to biology. Probably, CE in biology as a requirement for admission could decrease the number of drop-out students. The current plan of studies in the first semester asks for students to perform in specific study fields - ecology, botany, zoology and without any leveling courses or previous basic knowledge in biology it could be hard to cope.
The duration and scope of the study programme are reasonable. DU plans to implement a study programme in English which is a welcomed idea to attract more students from abroad and make the study programme more competitive. However, the study field is not fully prepared for the implementation of the study programme in English - it would be necessary to adapt its content by reducing the specialization on Latvian nature, to prepare course descriptions with appropriate literature and supplement library collection with actual literature in English, to further improve the English language skills of the academic staff, and develop a marketing plan to attract students from abroad, including European countries.

2.1.3. During the period under review, a number of changes took place in the study programme (SAR 3.1.). Overall, the changes made have been logical, justified and well thought out, aimed at programme development and regulatory compliance. However, some of the planned changes to the content of the study programme are a little worrying. The study course “Fizi1010, General physics (2 CP)” is planned to be exempted. This is undesirable because (1) students are awarded a natural science degree upon graduation, indicating that they have acquired basic knowledge in all fields of science; (2) basic physical knowledge is very useful in various sub-disciplines of biology and a physics course tailored for biologists would provide very useful and necessary knowledge, especially given that nanobiotechnology is one of DU's science specializations in biology. Also, knowledge in mathematics is one of the most highly rated and used (data visualization, statistics, analysis of data, especially in ecology etc.). Thus, DU has a plan for the study course “Biol1016, Biometrija (2 KP)” to be exempted due to overlapping of the study course content with that of “Mate1090, Mathematic methods in natural sciences”. The avoidance of overlapping content is to be welcomed, but in this case consideration should be given to whether this might necessitate an increase in course credit points for the study course “Mate1090” in order for students to fully master higher mathematics, statistics and data analysis. There also is a plan to reduce or increase the CP for several study courses which, in general, is not a huge change, however, it is worrying that a lot of courses connected with microbiology, molecular biology etc. are losing CP (Ķīmi1002, General and inorganic chemistry, Biol3001 Fundamentals of biochemistry, Biol2011, Histology, Biol2009 Cell biology). DU specializes in several sub-disciplines of biology, with a bias towards so-called "green biology", which is undeniably positive, but it should be possible for a student to specialize in different sub-disciplines of biology when graduating from a bachelor's degree. Such changes are likely to reduce students' knowledge in microbiology, molecular biology, cell biology, biochemistry etc. which is a disadvantage, especially taking into account that nowadays interdisciplinary research is a must and molecular biology methods are used more and more even in fields of zoology, ecology etc.

2.1.4. Graduates from the programmes in natural sciences are in demand on the labor market. DU is also undeniably an important institution for access to higher education in the region. At the same time, dynamics of the number of students are not encouraging and it is hard to understand how DU

copes with study programme maintenance costs. Statistics (SAR Annex 3.1.4.) show that only two students graduated from the study programme in 2022, during the reporting period the highest number of graduates were eight in 2021. Dropout rates look bad (more than 10 students per year in four out of six last years), indicating that students are not interested or satisfied with this study programme or are unable to cope with requirements.
Approximately a half of graduates continue studies in masters level (in Latvia or abroad) (SAR 3.1.). Data about employment of graduates looks reasonable, graduates mostly value education they got. Worrying fact is that only ⅓ of graduates would suggest this study programme to others and less than a half are satisfied with the chosen study programme (SAR annex 2.2.4.). However, it should be taken into account that the number of graduates is low, also the number of respondents in the survey may be low. Also, employers' survey shows partly conflicting views - representatives of scientific and technical services say that DU graduates have a good theoretical background, but representatives from agricultural fields disagree. Similar tendencies with diverging views are shown in responses to other questions. However, in general it seems that graduates from ABSP "Biology' fit well in the labor market (with certain exceptions).

2.1.5. Not applicable.

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

The study programme complies with the regulatory framework, its graduates are in demand on the labor market and are both ready for it and to continue their studies at master's level. However, the amount of students and graduates is dramatically low and dropout rates - high. Although DU has a plan to implement ABSP "Biology" in English, which is a great idea, unfortunately the study programme is not ready yet to be implemented for foreign students. Mostly, the proposed changes to the study programme are not fully argued.

Strengths:
1. DU plays a role as regional university and offers opportunity to get higher education in Latgale region;
2. Graduates from the field of natural sciences are in demand in labor market;
3. Strategy to offer ABSP "Biology' in English, thus attracting students from abroad and increasing the total number of students, is good.

Weaknesses:
1. Drop-out rates are dramatically high;
2. Number of students, especially, graduates, is too low;
3. Not all changes in study courses that DU plans to implement in the study programme, are well argued, raising concerns that students are not fully learning the different branches of natural science and the subfields of biology;
4. Study programme is not fully prepared to be implemented in English.

2.2. The Content of Studies and Implementation Thereof

Analysis

2.2.1. DU's academic bachelor's study programme "Biology" (43421) was created in accordance with the regulations of the Cabinet of Ministers of May 13, 2014 No. 240 "Regulations on the State Academic Education Standard" (https://likumi.lv/doc.php?id=266187).
The content of the study programme ABSP "Biology" in general corresponds to the objectives of the study programme to equip matriculated students at DU with theoretical knowledge and research

abilities in the field of biology. Descriptions of knowledge, skills and competences corresponding to level 6 of the Latvian Qualifications Framework (LQF). Volume of Bachelor's Study Programme is 122 CP, and it takes 3 years, or 6 semesters. The "Regulations on Studies at Daugavpils University" specifies the guidelines and methods for evaluating the academic results. The credit specifications of each individual study course reflect a more thorough description of the assessment. A "pass/fail" rating or a 10-point scale is used to rate study outcomes.

This summarizes the study programme parameters testifying of the compliance of the study programme to the state education standard (SAR p. 71; Annex 3.2.1.ABSP Biology_Compliance with national education standard). The whole ABSP "Biology" study programme curriculum, study programme course descriptions and study course mapping for achieving the study programme outcomes are provided in Annexes (3.2.1.ABSP Biology_study plan; III_3.2.1_ABSP Biologija studiju kursu apraksti; 3.2.1.ABSP_Biology_Study course mapping; https://du.lv/wp-content/uploads/2022/06/ENG-NOLIKUMS_PAR_STUDIJAM_DU_2018-1-1.pd)

The study programme's content is current, the study courses' and modules' content is connected and complementary, it aligns with the programme's goals, ensures the achievement of learning objectives. Compulsory part includes Analytical chemistry 2 CP; Plant physiology 4 CP; Biophysics 2 CP; Fundamentals of biotechnology 2 CP; Fundamentals of biochemistry 2 CP; Botany I 4 CP; Botany II 2 CP; Human anatomy 4 CP; Animal and human physiology 4 CP; Civil and environmental protection 2 CP; Civil and environmental protection: Civil defence 1 CP; Civil and environmental protection: Environmental protection 1 CP; Nature protection biology 2 CP; Fundamentals of evolution 4 CP; Histology 2 CP; Integrated field course "Species and habitats'' 2 CP; Integrated field course in biology 2 CP; Applied ecology 2 CP; Mycology 2 CP; Microbiology 2 CP; Molecular biology 4 CP; Organic chemistry 2 CP; Protistology 2 CP; Term paper I 1 CP; Term paper II 1 CP; Virusology 2 CP; General ecology 4 CP; General and inorganic chemistry 2 CP; Zoology I 4 CP; Zoology II 2 CP; Genetics 4 CP and Cell biology 2 CP. Each study course includes a thorough description that explains the knowledge, skills, and competencies the student will acquire as a result of completing the course. Every study course has requirements for attendance that should be regarded as a best practice to guarantee proper interdisciplinarity and connections between various degrees of complexity. However, there is a concern that changes in the study programme suggested by the independent experts may influence the quality of the studies. Bachelor studies should provide students with more general knowledge to give them broader knowledge and skills they could apply in a job market or in further studies. When the prerequisites for admission to the relevant study programme are met - which include having the necessary knowledge to successfully complete that programme - a bachelor's degree confers the right to pursue further studies in a master's degree programme, a professional master's degree programme, or a second-level vocational higher education programme. To satisfy this a good and well-balanced proportion of such capabilities should be present. The compulsory part and restricted elective part shall include the basics, principles, structure and methodology, the history of the development of the scientific field or subfield and the current challenges, and the characteristics and problems of the scientific field or subfield. It is evident that the study programme has a lack of mathematics for biologists and a insufficiency of physics and chemistry for biologists. Knowing that the modern technologies and approaches in the biology field require knowledge of mathematics, physics and chemistry, this could reduce the knowledge and skills students are required to obtain on the bachelor level and reduce their chances in continuing studies on master level or at the job market. The content of the study provides a broad knowledge in some specialized topics in biology, like Virusology, or Animal and human physiology and Parasitology, while the content is reduced in the general topics of basic science, as well as topics related to the laboratory work and some instrumental methods in biology. This should be balanced better in order to achieve top-notch education for biologists at DU, on bachelor level.

Since the DU is the only regional university that provides studies in the field of biological sciences to

those who are interested, it is of the utmost importance from the perspective of the development of the region. It is possible for students to receive education near to where they live if they are financially unable to attend school in Riga. A sizable portion of DU alumni continue to reside and work in the Latgale region, which helps the area's economic growth. This gives support to the designed study programme and its implementation. The positive sides are high level material and technical base and provision with qualified academic staff members, especially for some courses. Students have an opportunity to obtain in-depth knowledge and familiarize with the latest ideas in biology and have an opportunity to be involved in the research activities in the academic environment.
The study plan includes the mandatory elective part with an amount of 28 CP. According to the SAR Annex 3.2.1. ABSP Biology_study plan_ENG.xlsx the total amount of the study courses provided by DU as mandatory elective courses also is 28 CP, meaning that students do not have actual possibility to choose study courses in this study programme part. During the site visit this was also mentioned as a significant disadvantage by students.

2.2.2. Not applicable

2.2.3. Evaluation of the study programme, including the methods used to implement the study courses including an explanation of the methods' nature and how they support the programme's objectives and learning objectives shows that a list of methods is used: lectures, laboratory work, seminars, team work, individual work, practical classes and field work. Also, in a current situation the student workload in the session can be very high and several exams and other examinations. papers may be needed to be held in a short period of time. DU should consider and weigh out implementing a module system (it can also be done partly) to even out student workload over the semester. It could also help some members of the academic staff to balance academic and scientific workload.
The systems approach and the problem-oriented approach are the most crucial study methodologies employed in the practical implementation of the study programme. Lectures, laboratory work, seminars, independent student work, research projects and their presentation (for example, field course reports), independent work, group work, colloquia, tests, term papers, and bachelor theses are all examples of ways that the study programme is acquired (SAR p. 73).
The lectures primarily center around revisiting the fundamental issues within the course content. In these lectures, instructors make use of video projectors and interactive whiteboards. This approach is regarded as highly effective since it allows for swift adjustments and enhancements to the lecture material when needed, thanks to the electronic format of the course materials (SAR p. 73).
Laboratories at the DU's Institute of Life Sciences and Technologies, the Faculty of Natural Sciences and Mathematics' Department of Anatomy and Physiology, and the Department of Environmental Science and Chemistry all host various lab activities. Laser scanning microscopes, electron microscopes, gene analyzers, flow cytometers, gene amplifiers, various spectrophotometers for DNA, RNA, and protein quantification, equipment for digitally capturing gel photos, elysis centrifuges, and other modern laboratory necessities are all included in the labs' modern equipment (SAR p. 73).
Practical classes typically occur as a component of field courses, during which time students put their acquired theoretical knowledge, abilities, and skills into practice. It offers the chance to use theoretical knowledge to address particular issues in nature (SAR p. 73).
Because the foundation of a biologist's professional activity is the ability to raise an issue, identify solutions to it, and engage in discussion, seminars are a crucial type of academic study. These topics receive special emphasis in the seminars because thorough understanding of them is crucial for complete acquisition of the relevant course. In seminars, students learn how to present evidence of their comprehension of a subject and engage in problem-solving. Discussions and public

presentations on the chosen subject provide students with a powerful incentive to seriously commit to their individual study effort. In the course of learning the subject, there is a balance between the number of hours that students and academic staff members interact and the quantity of individual work that students complete (SAR p. 73).
In required and limited optional courses, teamwork is mostly employed in seminar classes to complete assignments in field courses, analyze errors made during the discussion of problems (questions), and look for potential solutions to problems (questions). A lot of effort is being put into creating study materials in an electronic format so that students who are working can learn the topic on their own. One of the study work focuses of the academic staff involved in the programme is to continue this effort. Individual assignments are used widely because they enable the teacher to quickly identify the questions that the students have not yet understood thoroughly and, in addition, to some extent, address the issue of poor attendance (SAR p. 73-74).
The total 40% of the credit points are split evenly between contact classes and student-initiated independent projects. Studies conducted online are utilized to enhance the autonomous work of the students. The Moodle platform, which serves as an extra means of contact between academic staff members and students, houses a sizable portion of the study materials. Many courses provide assignments for solo study, extra reading resources, and opportunities for collaborative conversation (SAR p. 74).
The concepts of student-centered education apply to both the study programme execution guidelines and the content of particular study courses. Students' opportunities are considered when planning the study process, and wherever possible, the class schedule is negotiated with the students. Individual and group consultations are scheduled according to demand and at a time that is most convenient for the students. Students are offered the option to connect to the class using the zoom conferencing website if necessary when executing the programme in full-time. Independent work is frequently conducted on the Moodle platform (SAR p. 74).
The listed approaches explain how the execution of the study process takes into account the student-centered concepts. Even though the study implementation methods contribute to the achievement of the aims and learning outcomes of the study courses and the study programme is organized in student-centered learning and teaching manner, there is still space for improvement. As evident from the site visit and SWOT analysis, the introduction of module system is incomplete and the opportunities for distant and e-studies are insufficient. Only a small portion of the possibilities of e-platforms are now being utilized, which is largely used as a platform for lectures and extra materials. The academic staff should be strongly encouraged to make use of all the features offered by this distant learning system (tests, knowledge proficiency exercises, etc.) in order to enhance the e-learning environment. The field work is not mentioned as an important approach and method in the implementation of the study programme, while there is a reasonable amount of field work as a method introduced in the study programme. Additionally facilities used for field work are well equipped and provide students with an excellent environment for studying. The listed methods proved the sufficient integration of studies and research work. In the teaching process the diversified study forms and methods are used.

2.2.4. Not applicable.

2.2.5. Not applicable

2.2.6. The topics of students' final theses are relevant to the field and correspond to the study programme. Students consult their scientific advisers, who are subject-matter experts with years of professional experience, before selecting the themes for their bachelor theses. At the meeting of the study field "Wildlife Sciences" Council, where one of the assessment criteria is relevance in the corresponding branch, the themes of the final thesis and the scientific advisers of the papers are

authorized. Scientific advisors assist in selecting the branch's most pertinent issues and coordinating the development of a particular topic for the study field council to evaluate. The study field council coordinates and the faculty of natural sciences and mathematics council approves the themes for bachelor theses (SAR p. 75).

The topics chosen for biology bachelor's theses are primarily connected to the areas of scientific expertise of the academic staff who are responsible for carrying out the study plan. The topics of bachelor theses created during the reporting period connect to numerous disciplines of biology, including biotechnology, and to current events in modern biological science. The information in the analysis are based on the whole list of topics and evaluations of defended bachelor theses for the evaluation period (SAR p. 75; Annex 3.2.6.ABSP Biology_Bachelor theses defended). The final thesis includes topics such as topics as blood parasites fauna of birds, systematics and fungi genus, mapping of plans, biotechnological potential of iron, development of methods for DNA extraction, etc.

The "Procedure for submission of final thesis for plagiarism control at Daugavpils University" that DU created and abides by mandates the electronic submission and storage of final theses in the DU information system while also giving students the chance to contrast their final theses with the set of theses defended in previous years. The technical design of the thesis, conformity with the bachelor level, the thesis' structure and content, as well as the veracity of the work, are all examined by one reviewer for each bachelor thesis. The thesis commission reviews the student's bachelor thesis in the defense process, considering the work's relevancy, the student's presentation abilities and subject-matter expertise, their responses to inquiries, their ability to back up their claims, and the caliber and effectiveness of the material they used to support their arguments. The average assessment score of the reviewer and the commission makes up the final evaluation (SAR p. 75; https://du.lv/wp-content/uploads/2022/09/Procedure-of-thesis-submission-for-plagiarism-control.pdf).

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

DU’s academic bachelor's study programme "Biology" (43421) was created in accordance with the regulations of the Cabinet of Ministers of May 13, 2014 No. 240 "Regulations on the State Academic Education Standard". The content of the study programme ABSP “Biology” corresponds to the objectives of the study programme to equip matriculated students at DU with high-caliber theoretical knowledge and research abilities in the field of biology, as well as theoretical and practical preparation that satisfies state needs and enables successful participation in the solution of economic problems, competition on the Latvian and international labor markets, and advancement of their professional and academic education. The content of the study provides a broad knowledge in some specialised topics in biology, while the content is reduced in the general topics of basic science, as well as topics related to the laboratory work and some instrumental methods in biology. This should be balanced better in order to achieve top-notch education for biologists at DU, on bachelor level. The study programme plan includes mandatory elective part but no actual possibility to choose study courses is provided. The concepts of student-centered education apply to both the study programme execution guidelines and the content of particular study courses. Evaluation of the study programme, including the methods used to implement the study courses, including an explanation of the methods' nature and how they support the study programme's objectives and learning objectives shows that a list of methods is used: lectures, laboratory work, seminars, team work, individual work, practical classes and field work. The topics of students' final theses are relevant to the field and correspond to the study programme. The topics chosen for biology bachelor's theses are primarily connected to the areas of scientific expertise of the academic staff who are responsible for carrying out the study plan.

Strengths:
1. DU is the only regional university that provides studies in the field of biological sciences.
2. High level material and technical base and provision with qualified academic staff members, especially for some courses.
3. Students have the opportunity to obtain in-depth knowledge and familiarize with the latest ideas in biology.
4. Facilities for field work provide an excellent environment for application of various methods of learning and contact with high level academic staff.

Weaknesses:
1. Opportunities for remote and e-studies are insufficient.
2. The content of the study programme should be balanced better in order to achieve top-notch education for biologists at DU, on bachelor level including the general topics of basic science, as well as topics related to the laboratory work and some instrumental methods in biology.
3. Compared to topics in biology disciplines related to field work, there are reduced opportunities for students interested in biology disciplines related to laboratory work, biochemistry, molecular biology and other disciplines.
4. List of elective courses is very limited.

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

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

Assessment of compliance: Not relevant

2.3. Resources and Provision of the Study Programme

Analysis

2.3.1. In order to achieve implementation of the study programme ABSP “Biology” DU has purposely invested in specified modern scientific tools and materials for both teaching purposes and research goals as well. That could be observed during the on-site visit of study and research units of Institute of Life Sciences and Technologies at DU. DU students have access to well-equipped and stocked laboratories and specialized offices for higher education purposes. Students have access to unique research opportunities in micro/nano-resolution X-ray microscopy and forest biodiversity at DU Study and Research Center “Ilgas” (SAR Annex 2.3.2. Infrastructure and material and technical provision_EN.docx).There is also a satisfactory amount of highly motivated and professional teaching staff that can educate and instruct students to ensure the necessary study or research objectives. In order to achieve study goals or advance bachelor thesis students have also access to several structural units of DU: Institute of Life Sciences and Technologies (Department of Biotechnologies, Department of Biosystematics, Department of Ecology, DU Study and Research Center “Ilgas”, Department of Technologies, Department of Applied Chemistry), Faculty of Natural Sciences and Mathematics (Department of Anatomy and Physiology, Department of Chemistry and Geography), DU Agency “Latvian Institute of Hydroecology''.
There is a possibility for bachelor and masters level students to enter DU organized research competitions to secure additional funding for research goals and receive funding to develop their practical, scientific, project managing skill and ultimately publish results in Web of Science and/or SCOPUS databases. In 2023 ten projects were approved of which eight were in the study field of wildlife sciences. Research subjects were in fields of botany, biotehnology, biodiversity and others

(https://du.lv/aktualitates/apstiprinati-daugavpils-universitates-studejoso-petniecibas-projektu-konkursa-2023-gada-rezultati/).
DU offers an extensive library collection catering to the academic and research needs of its students. The library provides convenient access to a wide-ranging catalog of books and periodicals in both Latvian and English languages, which are integral to the educational process. However, a notable deficiency exists within certain study courses, where the mandatory reading list exclusively comprises materials in the Latvian language. For instance, this discrepancy is evident in courses such as dendrology or histology (SAR Annex 3.2.1. ABSP Biology_Description of study courses_EN). This situation poses a considerable obstacle to international students and may hinder their effective engagement with the course material.
In light of this concern, it is imperative that DU undertakes a thorough examination to explore the feasibility of substituting these obligatory reading materials with English alternatives, without compromising the educational quality for both international and local students. Additionally, DU should ensure that the library possesses the capacity to promptly provide these materials as required. If, upon evaluation, it is determined that substituting these materials is not feasible, a comprehensive reassessment of the course plans and criteria should be conducted.
The procurement system for acquiring new materials or replenishing existing resources is well-established, meticulously documented, and effectively executed. As detailed in the self-assessment report (SAR p. 38-39), faculty members initiate the procurement procedures for new study materials or the renewal of existing ones. Subsequent to the review and approval of book purchase requests by the DU Budget Commission, the DU library efficiently manages the procurement process.
DU's reading rooms are furnished with adequate physical space and electronic equipment, ensuring an efficient environment for study. Furthermore, DU has implemented an integrated e-learning system (Moodle) as a digital platform for both faculty and students, as indicated in SAR (p. 39-40). This system has received commendation during interviews, as it offers seamless access and user-friendly functionality, successfully achieving its primary objectives.
Moreover, DU has made substantial investments in infrastructure adaptations to accommodate individuals with disabilities. This commitment is evident in the design of rooms and facilities, as well as the provision of specialized equipment and tools for studying (SAR p. 44-45). The DU Life Sciences and Technologies building, in particular, incorporates multiple ramps, accessible elevators, spacious hallways, study rooms, and aids designed to facilitate the educational experience for students with visual impairments.

2.3.2. Not applicable

2.3.3. DU main funding is allocated from the Ministry of Education and Science, depending on parameters like number of students, study programme level and study field priority. Further distribution of finances is done centrally by the DU Department of Finance and Accounting as shown in the Self Assessment Report (SAR p. 77-78). Calculated costs per student in an academic year is 5085.24 EUR, the minimum number of students in a group to ensure the profitability of the study programme is 9 students in a group. The largest share of these finances are allocated to the academic staff salary fund expenses, around 70%. At the same time only 9.2% or 466.88 EUR per student is allocated for the purpose of equipment purchase and investment. With knowledge of the cost of scientific equipment, this allocation is woefully inadequate to purchase any substantial new materials, it would most likely scarcely cover maintenance of already existing equipment.
Overall the distribution of financial resources seems sufficient to cover existing day to day expenses, provided a minimum number of students is achieved, but for larger investment costs DU must rely on other outside sources of revenue, like national or European projects.
As shown in the provided annex (SAR annex 3.1.4. ABSP Biology_Statistical data students_ENG.xlsx) in 2022 eleven students were admitted to the study programme which exceeds minimum

requirements. Worryingly, over the last six years average dropout rate is 10 students per year, while at same time only five students on average graduate each year. In 2022 the number of graduates was two.

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

Conclusions: DU is equipped with modern and robust academic learning infrastructure. Students are provided with all necessary material provisions as well as teaching staff support to successfully achieve study programme goals. Nevertheless the high numbers of dropouts is worrying, further investigations should be carried out to ascertain potential reasons for it and determine if there are any possible solutions to increase student graduation rate. If this problem is left untreated it could negatively affect the study programme rentability in the long term.

Strengths:
1. Modern, well stocked academic and research facilities.
2. Well designed and maintained library.
3. Considered actions to accommodate students with special needs.

Weaknesses:
1. Low number of students.
2. High ratio of dropouts to graduates.
3. Possible deficiencies in available study literature in English language.

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

Informative, material and technical provision and financial provision correspond with the conditions for the implementation of the study programme as currently required. But as stated previously in analysis section, there are possible issues for international students i.e. the mandatory reading list exclusively comprises materials in the Latvian language for some study courses. Therefore these requirements should be reevaluated and changes accommodated.

2.4. Teaching Staff

Analysis

2.4.1. The qualifications of the teaching staff implementing ABSP "Biology" are consistent with the study programme's implementation conditions, programme’s content and the requirements of legal acts. It was confirmed by appropriate declarations (annexe to the declaration that the academic staff involved in the implementation of the academic study programme meets the requirements specified in section 3, section 1, part of Article 55 of the Act on Universities (3.4.1.ABSP Biology_Statement_Article 55).
According to the information in the SAR (with annexes), 24 academic teachers run the courses, including four as professors, eight senior researchers and four researchers, six assistant professors and two lecturers.
The majority of the employees hold doctoral degrees, demonstrating their high level of education and expertise. Their specializations range from ecology, physiology, parasitology, zoology, and

botany to molecular biology and genetics, geography, GIS systems, and chemistry. In addition to their extensive knowledge base, they have made significant scientific achievements that encompass all subjects covered in our education programme.
However, a detailed analysis of the professional biographies of individual academic teachers shows great diversity in terms of involvement in various teaching activities that could improve teaching competencies (it especially applies to young staff with little experience). However, It should be emphasized that many employees are involved in domestic and international scientific and application projects.
The assessment of the teaching staff is significantly hindered by the lack of information regarding the level of experience academic teachers have in conducting bachelor's theses. Out of 24 teachers, ten did not provide information about the care of bachelor's students. And finally, knowledge of English is one of the basic criteria for starting the study programme in English. Here, too, the situation is very diverse, as most of the teaching staff declare their knowledge of English at the C1 and B2 levels and only 2 people have knowledge at the C2 level. As many as nine people declare their knowledge at B1 level (all or part of the skills - written, spoken or reading) (SAR Annexe 2.3.7.CV of academic staff_EN).

2.4.2. Presently, there are already some young scientists and two PhD students contributing to the implementation of the study programme. In the SAR, it was revealed that among the 24 lecturers involved in the course, an impressive 21 have been elected to DU. This figure represents a significant 87.5% of academics possessing PhD qualifications, underscoring their exceptional expertise and professionalism. To further enrich the academic staff, the proposal suggests engaging young specialists in the study process.
In exceptional cases, corrections are made by considering the comments of the structural units responsible for the courses of study or the field of study council. These modifications consider factors such as student surveys and other forms of reasoning. When selecting new instructors to teach classes, their knowledge and specialization are supposed to ensure the recruitment of highly qualified individuals with equivalent or higher qualifications. In exceptional circumstances, amendments are made after careful consideration of the feedback provided by the respective structural units responsible for the courses of study or the field of study council. These revisions take into account various factors, including student surveys and other forms of rationale. When appointing new instructors to teach classes, their expertise and specialization are expected to guarantee the recruitment of highly skilled individuals with qualifications equivalent to or higher than those required.
The study programme council ensures that changes in the teaching staff do not negatively affect the quality of the study process during the implementation of the study programme. When deciding to include new lecturers in teaching activities, their experience and specialization are carefully assessed. Specialists with equivalent or higher qualifications will be attracted to the study programme. The study programme council plays a crucial role in safeguarding the quality of the study process, particularly when it comes to changes in the teaching staff. Their primary responsibility is to ensure that any alterations do not have a detrimental impact on the overall quality of education. When considering the inclusion of new lecturers in teaching activities, careful evaluation takes place. Their experience and specialization are thoroughly assessed to ascertain their suitability. It is important to attract specialists who possess equivalent or higher qualifications, ensuring that they bring valuable expertise to enhance the programme.

2.4.3. Not applicable

2.4.4. Academic teachers are very diverse in terms of their activity in publishing, and this is quite a weak point in teachers' qualifications. Among 24 people included in the list of study teaching staff, 2

of them have no record in their CV`s, and one teacher has 0 publications in the last 6 years.
It is crucial to highlight that the group of assessed staff consists of exceptional scientists, including four individuals, two of whom have made significant contributions to science by publishing approximately 25 research articles during the evaluation period. Notably, a senior researcher, an immunologist, has published 50 papers throughout the reported timeframe. Similarly, another senior researcher, an ornithologist and animal ecologist, has demonstrated a high level of publication activity, with a total of 74 papers published during the same duration.

2.4.5. The cooperation of the academic staff of the study programme is diverse. It determines the activities related to the organization and management of the learning process, considering questions regarding the content of studies when planning events and cooperating in the field of research (including joint research within projects, writing publications, participating in scientific works conferences, etc.). Connectivity and the flow of information between the individual stages of studies (bachelor's degree, master's degree) are ensured by the fact that the majority, over 80% of the staff, conduct classes at these two levels of education. Moreover, based on conversations with teachers, some students are involved in scientific projects. Some of them participated as volunteer work in the framework of the scientific projects.

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

The academic staff generally is motivated, qualified and cares for the study courses and students. Most employees have doctoral degrees, and their education, specialization, and scientific achievements cover all the subjects of the study programme. Academic staff is very diverse in terms of their activity in publishing, with some of them having no or only a couple of publications.
Not all of the academic staff members have the minimum English language level of B2.

Strengths:
1. Most employees have doctoral degrees, and their education, specialization, and scientific achievements cover all the subjects of the study programme.
2. Many teachers are involved in national and international scientific and application projects.

Weaknesses:
1. Poor publishing activity of academic teachers (except for two people who publish very well).
2. For part of the teaching staff English language skills are below level B2.

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: Partially compliant

Staff qualifications are consistent; However, the scientific achievements (publications) of many lecturers are not fully satisfactory, as well as, not all have English language skill at least at level B2.

2.5. Assessment of the Compliance

Requirements

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

Assessment of compliance: Fully compliant

The study programme complies with the State Academic Education Standard as shown by SAR annex 3.2.1.ABSP Biology_Compliance with national education standard_EN.docx

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: Partially compliant

Study course description (3.2.1.ABSP Biology_Description of study courses_EN) are prepared in English and Latvian. Descriptions complies with regulation set forth in Law on Higher Education Institutions. Compulsory literature in many courses are in Latvian (for example, Fundamentals of biochemistry, Plant physiology, Protistology, Species and habitats, Zoology II) , so not suitable for the English speaking students. Some courses even have compulsory literature in Russian (for example, Biosystematics, Biogeography) that is not EU language. Many compulsory literature sources are more than 30-40 or 50 years old, that is not up to date in such fields as systematics.

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

Assessment of compliance: Fully compliant

The issued diploma complies with the state regulation - Cabinet of Ministers regulation No. 202 “Procedures by which documents certifying higher education recognition by the State shall be issued” (SAR annex 3.1.2. ABSP Bioloģija_Diploma un pielikuma paraugs_LV)

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

Assessment of compliance: Fully compliant

There are at least 5 associate professors and professors of the DU involved in the implementation of the study programme (SAR annex 2.3.7.Basic information about teaching staff_EN.xlsx).

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

All of the teaching staff involved in the implementation of the study programme are proficient in the official language (native language or the knowledge level of C1 or C2) (SAR Annexes 2.3.7.Basic information about teaching staff_EN.xlsx and 2.3.7.Statement_native language_EN.docx)

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: Partially compliant

Part of the teaching staff involved in the implementation of the study programme have English language level of at least B2 but at least nine of the teaching staff members have part of the language skills (written, spoken or reading) evaluated as only B1 (SAR Annexes 2.3.7.CV of academic staff_EN and 2.3.7.Basic information about teaching staff_EN.xlsx)

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

Assessment of compliance: Fully compliant

Study agreement complies with the national legislation and includes all the necessary parts (SAR Annex 3.1.2.ABSP Biology_Agreement on studies_EN.docx)

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

DU has an agreement with the University of Latvia about the possibility to continue studies in similar programme (Bachelor study programme Biology) (SAR Annex 2.1.4.Agreement between LU and DU_translation_EN.docx) but this agreement applies only to the studies in Latvian as the University of Latvia do not provide Biology programme in English at the bachelor level.

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

DU has provided confirmation signed by the rector of the university that students are guaranteed compensation for losses (SAR Annex 2.1.4.Statement_Compensation guarantee for students_EN.docx)

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 study programme partially complies with the Law on Higher Education Institutions as not all teaching staff members have English language skill at least at level B2, study course descriptions have outdated literature and there is no agreement for English speaking students to continue studies.

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

The study programme complies with the regulatory framework, its graduates are in demand on the labor market and are both ready for it and to continue their studies at master's level. The content of the study programme ABSP “Biology” corresponds to the objectives of the study programme to equip matriculated students at DU with high-caliber theoretical knowledge and research abilities in the field of biology, as well as theoretical and practical preparation that satisfies state needs and enables successful participation in the solution of economic problems, competition on the Latvian and international labor markets, and advancement of their professional and academic education. The study programme plan includes mandatory elective part but no actual possibility to choose study courses is provided. However, the amount of students and graduates is dramatically low and dropout rates - high. Mostly, the proposed changes to the study programme are not fully argued. DU is equipped with modern and robust academic learning infrastructure. Students are provided with all necessary material provisions as well as teaching staff support to successfully achieve study programme goals. The academic staff generally is motivated, qualifies and cares for the study courses and students. Most employees have doctoral degrees, and their education, specialization, and scientific achievements cover all the subjects of the education programme. Academic staff is very diverse in terms of their activity in publishing, with some of them having no or only a couple of publications.
Not all of the academic staff members have the minimum English language level of B2.
Although DU has a plan to implement ABSP “Biology” in English, which is a great idea, unfortunately the study programme is not ready yet to be implemented for foreign students.

Strengths:
1. DU plays a role as regional university and offers opportunity to get higher education in Latgale region.
2. Strategy to offer ABSP “Biology‘ in English, thus attracting students from abroad and increasing the total number of students, is good.
3. High level material and technical base and provision with qualified academic staff members, especially for some courses.
4. Students have the opportunity to obtain in-depth knowledge and familiarize with the latest ideas in biology.

5. Facilities for field work provide an excellent environment for application of various methods of learning and contact with high level academic staff.
6. Most employees have doctoral degrees, and their education, specialization, and scientific achievements cover all the subjects of the education programme.

Weaknesses:
1. Drop-out rates are dramatically high and the number of students, especially, graduates, is too low;
2. Not all changes in study courses that DU plans to implement in the programme, are well argued, raising concerns that students are not fully learning the different branches of natural science and the subfields of biology.
3. Study programme is not fully prepared to be implemented in English.
4. Compared to topics in biology disciplines related to field work, reduced opportunities for students interested in biology disciplines related to laboratory work, biochemistry, molecular biology and other disciplines.
5. Poor publishing activity of academic teachers (except for two people who publish very well).
6. For part of the teaching staff English language skills are below level B2.
7. Part of the study course descriptions contains outdated literature and literature not suitable for English speaking students.
8. There is no agreement for the English speaking students to continue their studies in a case when the study programme is closed.
9. There are no elective courses for students - since the number of students is low, most students have to take identical Part B study courses, making them "compulsory electives".

Evaluation of the study programme "Biology"

Evaluation of the study programme:

Average

2.6. Recommendations for the Study Programme "Biology"

Short-term recommendations

1) Before implementing the study programme in English, prepare a strategy for attracting English-speaking students.
2) Before implementing the study programme in English, revise study course descriptions to make them suitable for the English speaking students.
3) Within two years develop a strategy for increasing the number of students and decrease the drop-out rate.
4) Before implementing the study programme in English, agreement with other HEI to provide English speaking students to continue studies if the study programme is discontinued needs to be signed.
5) Within two years revise study course descriptions to include newer compulsory literature.
6) Before implementing the study programme in English, ensure that all teaching staff members involved in teaching of foreign students, have English language skills at least of level B2.

Long-term recommendations

1) Enhance the provision of remote and e-studies by expanding the course offerings, improving online resources, and making e-study opportunities more accessible to students, during the next accreditation period
2) Increase the opportunities and resources available for students interested in biology disciplines related to laboratory work, biochemistry, molecular biology, and other related fields to achieve a more balanced curriculum, during the next accreditation period.
3) Expand the list of elective courses to provide students with a more diverse range of options, during the next accreditation period.
4) Promote the necessity to publish in higher impact journals for the academic staff (during next accreditation period).
5) Increase the number of guest lecturers (e.g. from foreign universities and research institutions, Latvian research institutions and potential workplaces for students) involved in the study process and the number of guest lectures, including those organised remotely (during next accreditation period).
6) During the next accreditation period systematically increase the number of the literature available in English language.

II - "Biology" ASSESSMENT

II - "Biology" ASSESSMENT

2.1. Indicators Describing the Study Programme

Analysis

2.1.1. Academic master study programme “Biology” (code 45421), its aims (to prepare specialists in the field of biology), tasks (provide in-depth knowledge in biology, develop theoretical and practical skills for data processing, laboratory and field research) and results to be achieved (knowledge in the field of biology and basic principles of scientific research, skills to gather and analyze information, conduct scientific research) (SAR, p. 112-113) fully complies with the study field “Wildlife Sciences”. All of the compulsory study courses belong to the field of biology (SAR annex 3.2.1. AMSP Biology_Study plan_EN.xlsx), thus experts conclude that the programme is compliant with the study field “Wildlife Sciences”.

2.1.2. The title, code (45421), degree to be obtained (Master of Natural Sciences in Biology) of the AMSP “Biology” are in accordance with the normative regulation. Aims, objectives and learning outcomes of the study programme seems relevant, however, some of them overlap with the bachelor's study programme. For example, if both study programmes has an identical aims to “Know the basic principles of scientific research in biology”, “Can independently select, critically evaluate and analyze the obtained information”, “Can independently conduct scientific research in the fields of biological science”, “Able to take initiative and responsibility, working individually or as part of a team”. These are relevant skills to gain during studies, but during master’s studies students should deepen and strengthen their knowledge, and gain more new skills, but they shouldn’t repeat knowledge from bachelors studies.
Admission requirements (Bachelor degree in biology or medicine or environmental science or 2nd level higher professional education in the sphere of biology, medicine, pharmacy or veterinary medicine; for studies in English also English language skills at least B2 level) are reasonable, but DU could reconsider to enroll students with other degrees in natural sciences (mathematics, chemistry

etc.) to broaden the range of students who can be admitted to this study programme. The duration (2 years) and the scope of AMSP “Biology” is relevant, the opportunity to complete studies with an advanced specialization in one of the sub-programmes offered in the AMSP is well appreciated. Also, the study programme is licensed in both Latvian and English languages and this is a commendable strategy to increase the number of students. But only one student (in 2021) from abroad (Belarus) has enrolled in the study programme (SAR annex 3.1.4.). Marketing strategy for promoting AMSP “Biology” abroad by emphasizing its strengths and the possibility of specializing in specific subdisciplines of biology should be developed and put into practice.

2.1.3. No corrections in the study programme and its content are currently planned or done since licensing AMSP “Biology”.

2.1.4. Graduates from the master level programmes in natural sciences are in demand on the labor market. DU is also undeniably an important institution for access to higher education in masters level in natural sciences in the region. Dynamics of the number of students in AMSP looks better than for the ABSP “Biology”, dropout rate (SAR annex 3.1.4.) is much smaller (max five students per academic year), indicating that in masters level students are more confident about their choice and motivated in their studies. Also, with an exception in 2022, in recent years more than 10 students have enrolled each academic year. However, the number of students enrolled should be increased to ensure a balanced student population across all specializations.
No data about employment of the graduates of the AMSP “Biology” is presented due to the fact that it was licensed in 2021 and it did not have any graduates at the moment of preparing SAR (SAR 3.1.3.).

2.1.5. Not applicable

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

The study programme complies well with the regulatory framework, its graduates are in demand on the labor market. However, some of the learning outcomes of the AMSP could be revised to emphasize the knowledge and skills that are specific to the master's study programme and distinguish it from the bachelor's study programme.

Strengths:
1. DU plays a role as a regional university and offers the opportunity to get higher education in natural sciences at master’s level in Latgale region.

Weaknesses:
1. Study programme almost does not have students in its English version.
2. Learning outcomes are not fully focused on emphasizing gaining in-depth knowledge that are appropriate for master level studies.
3. Number of students is still low.

2.2. The Content of Studies and Implementation Thereof

Analysis

2.2.1. DU's academic master's study programme "Biology" (45421) was created in accordance with the regulations of the Cabinet of Ministers of May 13, 2014 No. 240 "Regulations on the State Academic Education Standard" (https://likumi.lv/doc.php?id=266187). The content of the study programme aims to prepare high level specialists in the field of biology with deep theoretical

knowledge and practical skills, capable of making independent decisions and conducting creative scientific research. The content is topical, interconnected and complementary, corresponds to the objectives of the study programme and ensures the achievement of learning outcomes that are not only defined for the particular study programme but for the master level in general , as well as meets the needs of the industry, labor market and scientific trends. The study programme complies with national standard qualification requirements. Volume of the Master Study Programme is 80 CP and it takes 2 years or 4 semesters. The Master study programme aims to produce highly qualified biologists with extensive theoretical understanding and practical expertise, capable of autonomous decision-making and innovative scientific inquiry. In one of the three available sub-programmes, "Biodiversity and its protection," "Aquaculture," or "Nature recreation," AMSP "Biology" students can specialize and obtain in-depth knowledge, skills, and talents which are relevant for the industry trends in the region. This will provide students with adequate opportunity to adjust to the expectations and needs of the labor market.

The aim and goals of the study programme, which are in line with the most recent developments in the European Union's educational system, with relevant Cabinet of Ministers regulations, with the DU Constitution, and with DU's top research priorities, determine the content of AMSP "Biology." The course material for AMSP "Biology" is created with the intention of giving students higher-level theoretical and practical knowledge, as well as research and scientific analysis abilities, preparing them for professional activity or future doctoral studies. This is visible from the creation of the sub-programmes, and knowledge and skills of courses “Methodology of biological research“, “Data analysis and interpretations in interdisciplinary research”, “Applied biology and bioeconomy”, “Practical research in biodiversity” and others that are seen in the AMSP content, are aligned with industry trends such as invasive species spread and their combating, fauna and flora studies; joint scientific expeditions; biodiversity investigation, nature management plans in protected areas Natura 2000; environment protection and sustainable territorial planning and other topics. (SAR p. 119, Annex 2.5.1. Cooperation partners_EN.docx).

The standards, principles, and scientific methods of biology and its subfields are covered in the Master's study programme, along with interdisciplinary answers to the field's contemporary issues. Students are given the chance to attend the required study courses (topics) as listeners, picking up the essential content, given that it is planned to address students with various levels of prior knowledge.

The acquisition of in-depth theoretical knowledge and the development of research skills and abilities in the selected sub-programmes of biology "Biodiversity and its protection," "Aquaculture," or "Nature recreation,", are the study results that are ensured by the content of the AMSP "Biology" study programme. Students who take the AMSP "Biology" courses add to and enhance their existing knowledge as well as learn new information, increase their scientific specialization, and increase their skills and competences in biology. For each study course as well as the whole study programme, learning outcomes are developed (SAR p. 119).

The study programme offers in-depth instruction in both theoretical and applied knowledge related to biology and its subfields. The students will demonstrate an in-depth understanding of the regularities of the functioning and development of biological systems at all levels of the life organization upon successful completion of the study programme and mastery of the study courses' content, earning a specialization in one of the sub-programmes offered in the Master's study programme ("Biodiversity and its protection", "Aquaculture" or "Nature recreation") (SAR p. 119).

The following knowledge will be thoroughly acquired by students during the study programme:

- Demonstrate critical comprehension of concepts, theories, and regularities, as well as theoretical expertise in the field of biological science;
- Have an integrative understanding of the fundamental biological concepts;
- Have a working knowledge of the fundamentals of biological research.

Students gain extensive academic and professional competences during the course of the study programme, which are represented in their skills. Based on the existing social, communicative, and academic abilities obtained in the bachelor study programme, the master study programme is carried out and specific study courses are learned. Students apply specific research methods to gain a narrower specialization in the field of research by participating in the practical and laboratory work required by the study programme, conducting research under the supervision of academic staff, and summarizing their findings in Master's theses. The acquired skills ensure that students, who are young, highly qualified specialists, are in compliance with the demands of the labor market in the relevant industry and that they will be able to work in management or organizational roles in state institutions or private businesses engaged in biology and related research in the future (SAR p. 120).
Students will learn how to:
- Freely choose, critically assess, and analyze the material they have acquired;
- Converse with other experts and professionals in related fields about current biological scientific challenges; and
- Be capable of conducting independent research in the various fields of biology.

Without collaboration with the academic staff involved in the study programme's implementation and fellow students, as well as without exploring the issues of sustainable rational use of biological resources, students cannot successfully complete the academic and research requirements of the Master's study programme. As a result, general human attitudes and academic skills are improved, while simultaneously expanding biological science skills and raising awareness of the need to protect and preserve nature (SAR p. 120).
Competencies that students will obtain as part of the study programme:
- The capability of acting independently and responsibly while cooperating with others.
- The capability of integrating biology-related knowledge into the process of self-improvement and self-development with an eye toward future professional careers.
- The capacity to assess the impact of one's skill and social context (SAR p.120).

Opportunities for continued education include doctoral study programmes at DU. Basic guidelines and methods for acquiring and evaluating the study programme, the acquisition and evaluation of the study programme adheres to the following principles: the principles of transparency, accountability, obligation, assessment review choices, and variety of test kinds are all important (SAR p. 120).
The "Regulations on Studies at Daugavpils University" specifies the guidelines and methods for evaluating the academic results. The credit specifications of each individual study course reflect a more thorough description of the assessment. A "pass/fail" rating or a 10-point scale is used to rate study outcomes. A list of documents testifying to the compliance of the study programme to the state education standard include AMSP “Biology” study programme curriculum, whereas study programme course descriptions and study course mapping for achieving the study programme outcomes (Annex 3.2.1_AMSP Biology study course descriptions; 3.2.1.AMSP Biology_Study course mapping; 3.2.1.AMSP Biology_Study plan, 3.2.1. AMSP Biology_Compliance with national education standard;
https://du.lv/wp-content/uploads/2022/06/ENG-NOLIKUMS_PAR_STUDIJAM_DU_2018-1-1.pdf). The criteria is well met.

2.2.2. Students who have already earned an eligible academic bachelor's degree or an adequate professional higher education in the biological sciences receive an academic Master of science degree in biology after finishing the study programme. The Master's degree is conferred in accordance with developments and discoveries in the field of biological science that are supported by the course material (SAR p. 121).

A review of the study programmes executed in the "Wildlife Sciences" study field of DU, as well as the resources and offerings of DU, were conducted as part of the process of establishing the study programme in 2021. A new study sub-programmes for AMSP called "Biology" were created based on the suggestions of specialists from the branch involved in the programme's development, including representatives of employers.The newly developed study programme's thematic and calendar structure offers a wide selection of required elective courses that satisfy the interests of the students and the academic staff's scientific specialization (SAR p. 121).
Students can specialize in one of three sub-programmes - "Biodiversity and its research", "Nature recreation" or "Aquaculture" - through the courses in the theoretical knowledge section of the study programme, gaining in-depth knowledge of the most crucially applicable facts of the theoretical knowledge covered in the study programme. Students thus have greater chances to adjust to the requirements and needs of the labor market. The study programme's framework also places a strong emphasis on giving students the tools they need to conduct independent scientific research and take part in the research process, both of which are essential for the production of a master's thesis. This could be visible from the courses of “Methodology of biological research”, “Environmental interpretation and demonstration”, “Project development and management”; “Methodology of interdisciplinary research” and others (SAR p. 121).
The European Commission's priorities for 2019–2024 were taken into consideration when creating the content of the new study programme, and special attention was given to EU long-term planning documents that were closely related to the field of biology (EU Biodiversity Strategy 2030, EU Long-term Climate Strategy 2050, etc.), in which the integration of the defined goals and objectives into the most significant sectoral policies was done SAR p. 122).
The criteria is well met.

2.2.3. Evaluation of the study programme, including the methods used to implement the study courses and modules, including an explanation of the methods' nature and how they support the study programme's objectives and learning objectives shows that a list of methods is used: lectures, laboratory work, seminars, team work, individual work, practical classes and field work, as described in details in section 2.2.3 of this report.
Additionally special attention is paid to students' independent work. Students' independent work includes reading and studying scientific literature, gathering and analyzing empirical data, writing reports and completing individual projects. The studies promote autonomous thinking on the part of the students while offering the instructor's supervision and assistance; the scope and content of the students' independent work, as well as its evaluation procedures, are described in each study course's description (SAR p. 123).
Students' independent work consists of a variety of tasks, such as researching sources and preparing for seminar classes, attending DU scientific conferences, developing and presenting projects and reports, visiting businesses and organizations, acquiring information, and database research (SAR p. 123).
Students get the chance to visit numerous companies, observe, and become familiar with business processes thanks to the long-standing and fruitful collaboration with local business owners. The list of companies include “Corporation ‘Latvijas valsts meži’”; “Axon’ Cable ltd”; “State plant protection service”; “Nacional Botanical garden”; “Institute of Agricultural Resources and Economics”; “Latgale Zoo”; “Latvian Nature Museum”; “Latvijas maiznieks ltd”; “Rural Support Service”; “Corporation Nagļi”; “Daugavpils regional hospital”; “ Nature Protection Board”; “Ecolat ltd”; “Latgale Planning Region”; “Latvian Forest Certification Council”; “Basis ltd”; “Daugmeteks ltd”; “Daugavpils City self-government”. Regular participants include foreign guest lecturers, representatives of local companies giving guest lectures, and others. This includes teaching staff from the Universities of Siauliai, Lithuania, of Tartu, Estonia, of Turku, Finland and of Mindanao, Philippines. Since classes are held in a foreign language or bilingually in the later stages of students' studies, they are given the

opportunity to familiarize themselves with the global experience in the relevant field of study as part of the lectures of foreign guest lecturers (SAR p. 123).
AMSP "Biology" abides with the standards and recommendations for quality assurance in the European higher education sector that were adopted in 2015. The study programme is executed in a way that encourages students to actively participate in the growth of the learning process, and the method used to evaluate student accomplishments is consistent with the requirements. Students' motivation, self-reflection, and involvement in the learning process are all strongly influenced by student-centered teaching and learning, according to the standards indicated above. This is demonstrated by the development and execution of carefully prepared study programmes and the evaluation of the study's results (SAR p. 123).
With consideration for the requirements and diversity of the students, AMSP "Biology" was developed and is currently being implemented. Students are given a variety of teaching methods during programme implementation, including remote participation in lectures, with the aid of video materials, the chance to receive consultations, etc., tailoring programme implementation to the abilities of the students. Therefore, the chance to enroll in the study programme is also given to individuals who, for a variety of reasons, are unable to attend classes on a daily basis, such as working students, mothers of young children, etc. While the students' abilities to work independently are being developed, the teaching staff's direction and assistance are still guaranteed, and their mutual respect for one another is encouraged (SAR p. 123).
All the fundamental principles of student-centered education are upheld throughout the course of the study programme's implementation, including constant reflection, an individualized approach to each student, avoiding a "one-size-fits-all" approach, consideration of each student's unique learning preferences, requirements, interests, experience, and prior knowledge, and evaluation of each student's knowledge, skills, and abilities by both the academic staff and themselves (SAR p. 124).
The methodologies outlined above describe how the student-centered notions are taken into account when the study process is carried out. Even while the methods used to administer the study courses help students reach their goals and learning objectives and the study programme is set up to emphasize student learning and teaching, there is always room for improvement.
The implementation of the module system is not complete, and there are not enough opportunities for online and remote study, as is clear from the site visit and SWOT analysis. Although there is a fair amount of fieldwork provided as a method in the study programme, it is not acknowledged as an important approach or method in its implementation. Facilities utilized for fieldwork are also well-equipped and offer students a great study environment. The approaches mentioned above demonstrated how well studies and research activity were integrated. Diverse study formats and techniques are used during the educational process. Since there is a small number of students in the programme, students have the opportunity to have the individual approach and contact with academic staff that can help them overcome the learning challenges.

2.2.4. Not applicable

2.2.5. Not applicable

2.2.6. The topics of students' final theses (for example, DNA synthesis and fragmentation in the organs of wheat (Triticum aestivum (L.)) sprouts in different photoperiods; Composition and ecology of the helminth fauna of the yellow-necked vole Apodemus flavicollis (Melchior, 1930) in the Gauja National Park, Predation stress of the fruit fly Drosophila melanogaster reaction proteomics) are relevant to the field and correspond to the study programme. Students consult their scientific advisers, who are subject-matter experts with years of professional experience, before selecting the topics for their master theses. The procedure of selection and approval of the topic, policy related to plagiarism, reviewing and assessment is the same, as explained in details in section 2.2.6. of this

report. The list of topics and evaluations of defended master theses for the evaluation period is in the annex ("Other Annexes", 3.2.6. AMSP Biology_Master theses defended; https://du.lv/wp-content/uploads/2022/09/Procedure-of-thesis-submission-for-plagiarism-control.pdf). The criteria is well met.

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

DU's academic master's study programme "Biology" (45421) was created in accordance with the regulations of the Cabinet of Ministers of May 13, 2014 No. 240 "Regulations on the State Academic Education Standard" (https://likumi.lv/doc.php?id=266187). The content of the study programme aims to prepare high level specialists in the field of biology with deep theoretical knowledge and practical skills, capable of making independent decisions and conducting creative scientific research. The content is topical, interconnected and complementary, corresponds to the objectives of the study programme and ensures the achievement of learning outcomes that are not only defined for the particular study programme but for the master level in general, as well as meets the needs of the industry, labor market and scientific trends. The study programme complies with national standard qualification requirements. The purpose and goals of the study programme, which are in line with the most recent developments in the European Union's educational system, with relevant Cabinet of Ministers regulations, with the DU Constitution, and with DU's top research priorities, determine the content of AMSP "Biology." The concepts of student-centered education apply to both the programme execution guidelines and the content of particular study courses. Evaluation of the study programme, including the methods used to implement the study courses and modules, including an explanation of the methods' nature and how they support the programme's objectives and learning objectives shows that a list of methods is used: lectures, laboratory work, seminars, team work, individual work, practical classes and field work. The topics of students' final theses are relevant to the field and correspond to the study programme. The topics chosen for biology master's theses are primarily connected to the areas of scientific expertise of the academic staff who are responsible for carrying out the study plan.

Strengths:
1. DU is the only regional university that provides studies in the field of biological science.
2. Students can specialize in one of three master studies sub-programmes - "Biodiversity and its research", "Nature recreation" or "Aquaculture".
3. Students have the opportunity to obtain in-depth knowledge and familiarize with the latest ideas in biology.
4. Special attention is paid to students’ independent work.
5. Students get the chance to visit numerous firms, observe, and become familiar with business processes thanks to the long-standing and fruitful collaboration with local business owners.
6. Students have the opportunity to have the individual approach and contact with academic staff that can help them overcome the learning challenges.
7. Facilities for field work provide an excellent environment for application of various methods of learning and contact with high level academic staff.

Weaknesses:
1. Introduction of module system is incomplete
2. Opportunities for remote and e-studies are insufficient.

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 teaching staff has practical expertise in the execution of research projects and contract work connected to the life sciences in addition to their academic work at the institution. This kind of activity helps to develop a thorough awareness of the particulars of the sector, guaranteeing a clear separation between theory and practice throughout the learning process. The ambitions of the academic staff members involved in the study programme are to successfully administer the study programme, and they frequently connect to the lecturer's area of expertise within the programme.

Annexes
2.4.3. Participation in projects, 2.5.1. Cooperation partners
International assessment of the activity of science institutions. Available: https://www.izm.gov.lv/lv/media/10705/download?attachment

2.3. Resources and Provision of the Study Programme

Analysis

2.3.1. To facilitate the successful implementation of the AMSP "Biology" study programme at DU, deliberate investments have been made in the procurement of advanced scientific tools and materials tailored for instructional and research purposes. This commitment to academic excellence and research innovation was evident during an on-site visit to the Institute of Life Sciences and Technologies at DU, where the educational and research units showcased state-of-the-art laboratories, well-stocked specialized offices, and a dedicated team of highly motivated and proficient teaching faculty (SAR p. 126-127). Overall material and provisional support for AMSP "Biology" study programme is comparable with that of ABSP "Biology", which can be reviewed in more detail in this report's corresponding chapter of the ABPS “Biology” (43421).
For master's level students there exists the possibility to participate in research competitions organized by DU, enabling them to secure supplemental funding for their research endeavors. This financial support is instrumental in honing practical, scientific, and project management skills and culminating in the publication of research outcomes in reputable databases such as Web of Science and SCOPUS. Like research in field of nanotechnology or biotehnology (https://du.lv/aktualitates/apstiprinati-daugavpils-universitates-studejoso-petniecibas-projektu-konkursa-2023-gada-rezultati/).
DU is equipped with a comprehensive library collection, designed to cater to both academic and research demands. The extensive catalog encompasses books and periodicals in both Latvian and English, serving as valuable resources for the study process. The library's adept system for material acquisition and replenishment is well-documented and efficiently executed. In a similar situation as already described in bachelors level study course there are multiple situations where the mandatory reading list exclusively comprises materials in the Latvian language, like for example civil defense course (3.2.1. AMSP Biology_Description of study courses_EN.zip). Such a position can create undue burdens for any potential international student and substantially impact their quality of academic pursuit.

2.3.2. Not applicable

2.3.3. DU primarily relies on funding from the Ministry of Education and Science, with allocation dependent on specific criteria including student enrollment, the level of study programmes, and the

priority of the study field. The subsequent financial disbursement is centralized and administered by the DU Department of Finance and Accounting, as detailed in the Self Assessment Report (SAR, pages 127-128).
The calculated cost per student for an academic year amounts to 9284.34 EUR, from which 86.1% are salaries and tax, 3.9% for equipment and investments, 4.5% for student social security and 1.8% for student services and in general all the expenses of the study programme can be covered. To ensure the economic viability of a study programme, a minimum of 5 students per group is required. The costs of the study programme in Latvian and English do not differ (SAR, p. 127-128). Therefore the same minimum student requirements apply also for international students.
.The data presented in annex (SAR Annex 3.1.4 - AMSP Biology Statistical Data Students_ENG.xlsx) reveals that in 2021 there were 14 students enrolled and in 2022, only four students were admitted to the study programme, also falling short of the established minimum requirements for one year, on average the number of the students is above minimum of 5. Similar situation was for the previous Biology master programme, when the number of the students was less than 5 in 2017 and 2019. Furthermore drop-out rates are alarmingly high, mirroring the number of programme graduates. In 2022 five students dropped out (more than the number of students that enrolled in that year). The persistently low student enrollment levels indicate that this programme lacks self-sufficiency and necessitates the reallocation of financial resources from alternative sources. If this trend persists, it could potentially impact the viability of the entire study field. Also the number of the graduates is low compared to the admission, for example, in 2022 only three graduates (from the previous master programme), compared to enrolment of 14 students in 2021 and dropout of five students.

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

DU boasts a contemporary and robust academic infrastructure that empowers students with essential resources and the guidance of a dedicated teaching faculty, ensuring the attainment of their academic objectives. However, the limited enrollment of master's degree students places substantial financial strain on the entire study programme. Consequently, the recruitment of new students is of utmost significance to avert prospective fiscal instability.

Strengths:
1. State-of-the-art, well-equipped academic and research facilities.
2. A meticulously planned and impeccably maintained library.
3. Thoughtful measures taken to accommodate students with special needs.

Weaknesses:
1. A markedly low student enrollment.
2. A high dropout-to-graduate ratio.

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

Informative, material and technical provision and financial provision correspond with the conditions for the implementation of the study programme

2.4. Teaching Staff

Analysis

2.4.1. According to the self-assessment report (including annexes), the study programme is run by 27 academic teachers, including four professors, eight senior researchers and four research workers, 12 researchers, 8 associate professors and 1 assistant professor. Most employees have doctoral degrees, and their education, specialization and scientific achievements cover the entire subject of the education program. The directions of research work of academic staff involved in the study programme are consistent with the study programme and, in most cases, are related to the teacher's specialization within the program. External research staff, especially visiting lecturers, engage in various professional development activities corresponding to the educational profile. For example, 2 hydrobiologists PhD students (limnologist) are employees of the Latvian Institute of Aquatic Ecology.Including researchers affiliated outside DU and visiting lecturers in the education process is of particular value. Their scientific achievements and experience in implementing foreign and domestic scientific projects increase the average qualifications of employees permanently employed at DU.
It is noteworthy that there is an overrepresentation of specialists (entomologists, hydrobiologists) included in the education process for master's studies. At the same time, teachers of other specialities seem to teach several subjects loosely related to their professional profile (i.e. soil science is taught by non-specialist of this profile).
Most of the teaching staff involved in the implementation of the study programme have English language level of at least B2 but at least five of the teaching staff members have part of the language skills (written, spoken or reading) evaluated as only B1 (SAR Annexes 2.3.7.CV of academic staff_EN and 2.3.7.Basic information about teaching staff_EN.xlsx).

2.4.2. AMSP “Biology” was licensed on 19.05.2021 (license number 04041-103). Since the issue of the study programme license, there have been no changes in the academic staff of the study programme. Changes were not planned within the evaluation procedure of the study field either.

2.4.3. Not applicable

2.4.4. The academic staff involved in the Master's study programme is 90% the same as in the Bachelor's study programme. Therefore, in this case, the assessment of their activities was presented in Bachelor`s study programmes teaching staff assessment (see chapter 2.4.4 of this report for BSP “Biology”). It is worth noting that external researchers and visiting professors have significantly increased the average number of publications over the last 6 years. It is interesting that in the case of many of them, these publications are affiliated outside DU. For example, senior researcher from the Latvian Institute of Aquatic Ecology has published 28 articles. In addition to the previously mentioned scientists, two senior researchers, who have achieved significant scientific success with over 50 publications, there are other scientists with less impressive achievements, typically publishing a dozen or a few publications during the assessed period.

2.4.5. Connectivity and information flow between individual stages of studies (Bachelor's, Master's) are ensured by the fact that the majority, over 80% of the staff, conduct classes at these two levels of education. Moreover, conversations with teachers show that some students are involved in scientific projects. Some can participate as a volunteer in the frame of the projects in their first years of studies.
Unfortunately, there is a lack of available information (such as in SAR) on improved exchange of information and efficient coordination of teaching activities between academic teachers at the DU and lecturers in external research units. There were no representatives from academic staff

employed outside DU among the teachers invited to talks with the expert panel. Therefore, it isn't easy to accurately assess whether these employees have a significant impact on the level of education. On one hand, the inclusion of external lecturers who possess exceptional scientific accomplishments and considerable expertise in grant implementation can be advantageous. However, on the other hand, it may pose challenges in terms of management and communication among teaching staff and the lecturer-student relationship. While having external lecturers can bring fresh perspectives and enrich the education process with their valuable insights, it is important to ensure that effective communication channels are established to facilitate seamless collaboration. This could involve regular meetings or online platforms where teaching staff and external lecturers can exchange ideas, clarify expectations, and address any concerns that may arise. Furthermore, clear guidelines for coordination should be put in place to establish a harmonious working relationship between all parties involved. Effective management strategies such as regular evaluation sessions or feedback mechanisms can help identify any potential issues early on and allow for prompt resolution.
It is recommended to organize regular meetings between external lecturers and local staff. This can be achieved by organizing joint scientific seminars, encouraging the participation of external lecturers in educational events, and fostering greater and systematic cooperation with students.

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

The academic staff consists of experienced and scientifically active people. Their expertise provides master students with high-quality educational and research opportunities. They offer a diverse range of research topics that are attractive to master students.
Whilst incorporating external lecturers who possess remarkable scientific accomplishments and expertise in grant implementation can undeniably yield advantages, it is important to acknowledge the potential challenges that arise in terms of staff management, effective communication, and the cultivation of relationships between lecturers and students. The inclusion of external lecturers in the educational process undoubtedly brings valuable insights and innovative perspectives to the table. Nevertheless, it is imperative to establish efficient communication channels that guarantee smooth collaboration among all parties involved.
Not all of the academic staff members have the minimum English language level of B2.

Strengths:
1. The scientific achievements and experience in implementing foreign and domestic scientific projects of researchers affiliated outside DU and visiting lecturers increase the average qualifications of employees permanently employed at DU.
2. Connectivity and information flow between individual stages of studies (Bachelor's, Master's) are ensured by the fact that the majority, over 80% of the staff, conduct classes at these both levels of education.

Weaknesses:
1. Unclear communication and coordination channels between lecturers employed at DU and outside the DU.
2. Poor publishing activity of some of the academic staff.
3. For part of the teaching staff English language skills are below level B2.

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: Partially compliant

The teaching staff consists of the experienced and scientifically active people with the publications in the scientific journals. However, for part of the teaching staff the scientific achievements (publications) are not fully satisfactory, as well as, not all have English language skill at least at level B2

2.5. Assessment of the Compliance

Requirements

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

Assessment of compliance: Fully compliant

The study programme complies with the State Academic Education Standard as shown by the SAR annex 3.2.1. AMSP Biology_Compliance with national education standard_EN.docx

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: Partially compliant

Study course description (3.2.1.AMSP Biology_Description of study courses_EN) are prepared in English and Latvian. Descriptions complies with regulation set forth in Law on Higher Education Institutions. Compulsory literature in many courses are in Latvian (for example, Aquaculture technologies, Ecosystem services), so not suitable for the English speaking students. Some courses even have compulsory literature in Russian (for example, Aquaculture Technologies) that is not EU language. Some compulsory literature sources are more than 30 years old.

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

Assessment of compliance: Fully compliant

The issued diploma complies with the state regulation - Cabinet of Ministers regulation No. 202 “Procedures by which documents certifying higher education recognition by the State shall be issued” (SAR annex 3.1.2.AMSP Bioloģija_Diploms un pielikums_LV)

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

Assessment of compliance: Fully compliant

There are at least 5 associate professors and professors of the DU involved in the implementation of the study programme (SAR annex 2.3.7.Basic information about teaching staff_EN.xlsx).

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

All of the teaching staff involved in the implementation of the study programme are proficient in the official language (native language or the knowledge level of C1 or C2) (SAR Annexes 2.3.7.Basic information about teaching staff_EN.xlsx and 2.3.7.Statement_native language_EN.docx)

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: Partially compliant

Most of the teaching staff involved in the implementation of the study programme have English language level of at least B2 but at least five of the teaching staff members have part of the language skills (written, spoken or reading) evaluated as only B1 (SAR Annexes 2.3.7.CV of academic staff_EN and 2.3.7.Basic information about teaching staff_EN.xlsx)

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

Assessment of compliance: Fully compliant

Study agreement complies with the national legislation and includes all the necessary parts (SAR Annex 2.1.4.Agreement on studies_DU_EN.docx)

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

DU has an agreement with the University of Latvia about the possibility of continuing studies in

similar programme (Master study programme Biology) (SAR Annex 2.1.4.Agreement between LU and DU_translation_EN.docx) but this agreement applies only to the studies in Latvian as the University of Latvia do not provide Biology study programme in English at the master level.

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

DU has provided confirmation signed by the rector of the university that students are guaranteed compensation for losses (SAR Annex 2.1.4.Statement_Compensation guarantee for students_EN.docx)

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 study programme partially complies with the Law on Higher Education Institutions as not all teaching staff members have English language skill at least at level B2, study course descriptions have outdated literature and there is no agreement for English speaking students to continue studies.

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

The study programme complies well with the regulatory framework, its graduates are in demand on the labor market. However, some of the learning outcomes of the AMSP could be revised to emphasize the knowledge and skills that are specific to the master's study programme and distinguish it from the bachelor's. The content of the study programme aims to prepare high level specialists in the field of biology with deep theoretical knowledge and practical skills, capable of making independent decisions and conducting creative scientific research. The content is topical, interconnected and complementary, corresponds to the objectives of the study programme and ensures the achievement of learning outcomes, as well as meets the needs of the industry, labor market and scientific trends. The topics of students' final theses are relevant to the field and correspond to the study programme. The topics chosen for biology master's theses are primarily connected to the areas of scientific expertise of the academic staff who are responsible for carrying out the study plan. DU boasts a contemporary and robust academic infrastructure that empowers students with essential resources and the guidance of a dedicated teaching faculty, ensuring the attainment of their academic objectives. However, the limited enrollment of master's degree students places substantial financial strain on the entire study programme. Consequently, the

recruitment of new students is of utmost significance to avert prospective fiscal instability.
The academic staff consists of experienced and scientifically active people. Their expertise provides master students with high-quality educational and research opportunities. They offer a diverse range of research topics that are attractive to master students.
Although the study programme is licensed to be implemented in English, there is still some preparation needed to start enrolling English speaking students.

Strengths:
1. DU plays a role as a regional university and offers the opportunity to get higher education in natural sciences at master's level in Latgale region.
2. Students can specialize in one of three master studies sub-programs - "Biodiversity and its research", "Nature recreation" or "Aquaculture".
3. High level material and technical base and provision with qualified academic staff members, especially for some courses.
4. Students have the opportunity to obtain in-depth knowledge and familiarize with the latest ideas in biology.
5. Students have the opportunity to have the individual approach and contact with academic staff that can help them overcome the learning challenges.
6. Facilities for field work provide an excellent environment for application of various methods of learning and contact with high level academic staff.
7. The scientific achievements and experience in implementing foreign and domestic scientific projects of researchers affiliated outside DU and visiting lecturers increase the average qualifications of employees permanently employed at DU.

Weaknesses:
1. Study programme almost does not have students in its English version.
2. Learning outcomes are not fully focused on emphasizing gaining in-depth knowledge that are appropriate for master level studies.
3. Number of students is still low.
4. Introduction of module system is incomplete.
5. Opportunities for remote and e-studies are insufficient.
6. Part of the study course descriptions contains outdated literature and literature not suitable for English speaking students.
7. There is no agreement for the English speaking students to continue their studies in case the study programme is closed.
8. Unclear communication and coordination channels between lecturers employed at DU and outside the DU.

Evaluation of the study programme "Biology"

Evaluation of the study programme:

Good

2.6. Recommendations for the Study Programme "Biology"

Short-term recommendations

1) Within two years prepare a strategy for attracting English speaking students.
2) Within one year revise study course descriptions to make them suitable for the English speaking students.

3) Within two years revise learning outcomes to emphasize differences with the bachelor's study programme.
4) Within two years develop a strategy for increasing the number of students and decreasing the drop-out rate.
5) Within two years, agreement with other HEI to provide English speaking students to continue studies if the programme is discontinued should be signed.
6) Within two years revise study course descriptions to include newer compulsory literature.
7) Before starting enrollment of the students in English-speaking group, ensure that all teaching staff members involved in teaching of foreign students, have English language skills at least of level B2.

Long-term recommendations

1) Complete the implementation of the module system in the curriculum during the next accreditation period, ensuring that all required modules are integrated and clearly defined, and track the progress of this completion in regular assessments.
2) Enhance the provision of remote and e-studies by expanding the course offerings, improving online resources, and making e-study opportunities more accessible to students, within the next accreditation period.
3) Within the next accreditation period develop clear guidelines for the communication with lecturers whose main workplace is outside the DU.
4) Promote the necessity to publish in higher impact journals for the academic staff (during next accreditation period).

II - "Biology" ASSESSMENT

II - "Biology" ASSESSMENT

2.1. Indicators Describing the Study Programme

Analysis

2.1.1. Doctoral study programme “Biology” (code 51421), its aim (to prepare a highly qualified specialist, scientist in biology who is able to set and solve the most important problems of modern biology) and results to be achieved (knowledge of the most current scientific theories, research methodology and methods in biology, modern research methodology in various biology subfields, skills - to be able to independently evaluate and choose suitable scientific research methods, contribute to expanding the frontier of knowledge or provide a new understanding of existing knowledge and its application in practice, including by publishing scientific publications, competences to perform independent, critical analysis, synthesis and evaluation, to solve important research or innovation tasks competences to propose the research idea, plan and structure independently, manage large-scale scientific projects, including in an international context) complies well with the study field “Wildlife Sciences”. Probably study programme results: 1) Knows and understands the most current scientific theories and methods in biology; 2) Familiar with modern research methodology and modern biological research methods in various subfields - regarding knowledge could be merged into one result.

2.1.2. The title (“Biology)”, code (51421), degree to be obtained (PhD in natural sciences), aims, objectives, learning outcomes and admission requirements are interrelated. The aim of the study programme is to prepare a highly qualified specialist, scientist in biology who is able to set and solve the most important problems of modern biology (SAR 3.1.2.), objectives of the programme complies well with it and results to be achieved. Admission requirements are a Master’s degree in biology or related fields or an equivalent higher education and during the admission, discussions on the research topic and discussions in a foreign language (English) are organized (SAR 3.1.2.). Discussions with PhD applicants are very good, also PhD supervisors could be questioned to be sure that they are aware of requirements for themselves and their future students. It would also be worthwhile to include in the entry interviews an assessment of whether the student is working on a PhD within an existing project and what the potential is for the potential student to start work on a funded project that could lead to a development of research work and successful defense of PhD thesis. It would help to avoid situations where students leave their PhD studies due to the lack of funding and/or time for scientific research due to a need to work in an unlinked field.
Current duration of the study programme is three years. It could be useful to let students be flexible in the length of their studies due to specificity of individual research (up to five years). There are many cases when it is impossible to collect biological data and publish it in such a short period of time.
There are no essential objections to implementing this study programme in English due to the fact that most of the studies are individual work and the student communicates mostly with his supervisor.

2.1.3. No significant changes have been made in the parameters of the study programme since the previous accreditation in 2011. The university is currently planning to start implementing the doctoral study programme in English. There are no major gaps in the involvement of potential foreign students in research and to develop PhD work at DU, however some problems may be with study courses. Currently some courses - “Elaboration of doctoral thesis”, “Doctoral examination in speciality”, “Doctoral examination in English”, “Civil defense”, “Environmental protection” lack course descriptions in Latvian and English. It is also an open question for discussion - is it needed to examine students in English during studies (“Doctoral examination in English”), if the programme is implemented in this language and knowledge of it is already an admission requirement? Also, DU showed that academic staff is ready to supervise doctoral thesis for foreign students, but didn’t show readiness to offer study courses.
But, it should be noted that soon doctoral studies will undergo a gradual transition to the new doctoral studies model. On the basis of the conceptual report “On the implementation of a new doctoral study model in Latvia” (approved on June 25, 2020 by Cabinet of Ministers Order No. 345) all doctoral study programmes in Latvia will face significant changes in their implementation and structure. No specific plan or ideas for transition to the new doctoral studies model were present in SAR or during site visit.

2.1.4. Latvia has a low number of PhDs - only 0,4% of those aged between 25 and 64 have a PhD (in Europe the average number is 1,1% (https://labsoflatvia.com/en/news/only-0-4-of-latvians-have-a-phd-while-the-european-average-is-1-1). In general Latvia highly lacks graduates of doctoral study programmes in all disciplines. DU at the same time is offering the possibility to receive a PhD in Latgale region and maintaining a development of certain specializations in such subfields of biology as ecology, animal parasitology, coleopterology etc. But it should be noted that most likely DU is able to offer the possibility to develop theses only in areas of research which are in line with its strategy of specialization (Aquaculture and hydroecology; Biodiversity and forest ecology; Animal parasitology; Coleopterology; Nanobiotechnology and nanosafety; Molecular Ecology; Behavioral and physiological

ecology). It should be clearly communicated with future students that theses in other themes, other subfields of biology could be hard to elaborate in DU.
Dynamics of the students are reasonable, each year typically four to seven students are admitted. Although the dropout rate is mostly stable (two to three students per year) (SAR annex 3.1.4.), the number of graduates per year (typically two students with some exceptions) shows that students struggle with finishing their thesis and often get stuck for several years. It could also be connected with poor funding for doctoral students and their research. Same time, employment indicators for the graduates look commendable. Most of the graduates continue their careers in DU. From one point of view it is great and helps to renew academic and scientific staff in DU, from another it raises doubts about the ability of graduates to perform in other scientific institutions, including abroad.

2.1.5. Not applicable

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

DSP “Biology” complies well with the study field and current formal requirements. It is also possible to implement it in English. The number of students that enroll each year is stable, but the number of graduates must be higher. In the near future all DSP programmes in Latvia, including DSP “Biology” will face serious challenges due to the conceptual report “On the implementation of a new doctoral study model in Latvia”.

Strengths:
1. Study programme offers an opportunity to specialize very well at a doctoral level in specific subfields in biology

Weaknesses:
1. Study programme lack flexibility due to the length and content of it.
2. Number of graduates is much lower than number of students that enroll each year.
3. Study programme offers specialization in certain subfields of biology (same as in their strategy) and it may be hard to develop PhD thesis in other subfields.

2.2. The Content of Studies and Implementation Thereof

Analysis

2.2.1. The subject matter of the DSP "Biology" is concentrated on acquiring the skills required for the branch of biology science, contemporary scientific theories and ideas, and research procedures. Through the study courses' content, established goals, and other factors (See the descriptions of the DSP "Biology" study courses in annex 3.2.1), indicators are connected to the study programme's objectives and results that can be attained. It should be mentioned that some study courses (“Elaboration of doctoral thesis”, “Doctoral examination in speciality”, “Doctoral examination in English”, “Civil defense”, “Environmental protection”) do not have study course descriptions in Latvian and English. The requirements set regarding the publication of research results in internationally indexed scientific publications and participation in international scientific conferences develop students' capacities to independently perform critical analysis, synthesis, and evaluation of scientific information as well as to complete significant research or innovation tasks. The goal of the study programme is to prepare highly competent specialists and biologists who can formulate and address the most pressing issues in contemporary biology (SAR p. 91).
The study outcomes attained through the study programme (knowledge, skills, and competence) must guarantee the accomplishment of the study programme's goal, thereby promoting the

development of the nation's knowledge and innovation-based economy and its sustainability.
Students in the study programme are knowledgeable about and have an understanding of the most recent biological ideas, research procedures, and techniques used in numerous fields of biology:
Is familiar with and comprehends the most recent biological scientific theories and techniques.
Acquainted with contemporary research techniques and contemporary biological research techniques with a variety of subfields (SAR p. 91).
Students who complete a significant amount of original research - some of which is at the level of internationally cited publications - during the course of the study programme are able to independently evaluate and select appropriate scientific research methods, have invested in extending the boundaries of knowledge or provided a new understanding to existing knowledge and its applications in practice. They are also able to communicate with other scientists and members of society in general, both verbally and in writing, about his scientific activity. Capable of autonomously enhancing his scientific credentials, carrying out scientific initiatives, and generating results that satisfy the global standards of the scientific discipline (SAR p. 91):
- Ability to independently assess and select appropriate scientific research methodologies, contribute to advancing knowledge or offer a fresh perspective on what is already known and how it is applied in practice, including through the publication of scientific papers.
- Capable of conveying ideas in his scientific discipline to the larger scientific community and society at large, both verbally and in writing.
- Capable of independently developing their scientific expertise, carrying out research projects, and obtaining internationally recognized scientific accomplishments (SAR p. 91).

Students can tackle significant research or innovation tasks by undertaking independent, critical analysis, synthesis, and assessment. They can also independently present a research concept and design, arrange, and manage large-scale scientific initiatives, including those that take place in international settings:
- Able to do significant research or innovation projects by performing autonomous, critical analysis, synthesis, and evaluation.
- Able to independently suggest the study topic, plan, and structure.
- Able to oversee complex scientific initiatives, including those that take place internationally.

At the same time, the current study format is not convincing, as several courses lack course descriptions and the experts were not convinced during the site visit that all of them are actually happening. Consequently, there is no assurance that students are achieving all the objectives of the study programme equally, for example, knowledge and exposure to current methodologies in the field that are not practically included in the research part of a particular student's dissertation. As what the student learns during the research work differs a lot, as it should be, nor are the supervisors and methods how they work with their students monitored, certain objectives of the study programme may be achieved at different levels.
Basic guidelines and methods for acquiring and evaluating the study programme: the acquisition and evaluation of the study programme adheres to the following principles: the principles of transparency, accountability, obligation, assessment review choices, and variety of test kinds are all important (SAR p. 93).
The DSP "Biology" implemented by DU will gradually transition to a new doctoral model in consideration of the planned changes in the implementation of doctoral study programmes in Latvia, which will be implemented on the basis of the conceptual report "On the implementation of a new model of doctoral studies in Latvia" (supported on June 25, 2020 by Cabinet of Ministers Order No. 345). "PhD study programme development plan 2020-2026 for the implementation of the new doctoral model at Daugavpils University" was created by DU in 2020 (SAR p. 93).
The doctorate study programme development plan is intended to help put the "Latvian Smart

Specialization Strategy" concept into practice. It is a component of the broader research strategy found in the Daugavpils University Development Strategy. The development plan for the doctoral study programme is divided into two sections: 1) a summary of DU's existing state, which includes a look at its PhD programs and research capabilities; and 2) a description of the new doctoral model and its annexes, as well as implementation plans (SAR p. 93).
The DU Doctoral School regulations will ensure that it complies with European best practices and international standards, as well as set the stage for collaboration with other Latvian and international higher education and scientific institutions, and they will be developed in 2023. First-year DSP "Biology" students at the Doctoral School of Denver will begin their studies in 2023–2024. DU intends to finish making the gradual switch to the new PhD model by the end of 2026. It meets the challenges of the future and is based on the emphasis on students' independent work, synergy of study and research work, preparing specialists who are competitive on the job market, as well as the acquisition of the courses developed within the study programme, participation in doctoral seminars, doctoral school, and systematic cooperation with the doctoral research adviser (SAR p. 93).
A list of documents testifying to the compliance of the study programme to the state education standard include compliance with national education standard, DSP “Biology” study programme curriculum; study programme course descriptions and study course mapping for achieving the study programme outcomes (SAR Annexes 3.2.1.DSP Biology_Study plan; 3.2.1_DSP Biology_study course descriptions; 3.2.1.DSP Biology_study course mapping). The criteria is well met.
Study plan (for 2022/2023 and for next academics years, SAR p. 87, SAR Annex 3.2.1.DSP Biology_Study plan) does have any study course for the development of the pedagogical skills as those skills are essential for potential future members of the academic staff.

2.2.2. Students who have previously earned a corresponding academic master's degree or corresponding professional higher education in the field of biological sciences receive a doctoral degree in natural sciences in biology after finishing the study programme. The biological science field's accomplishments and discoveries form the basis for the awarding of scientific degrees, which is supported by the study programme's curriculum.
According to “Daugavpils University development strategy for 2015.-2020”, DU has seven priority research directions in biology:
1) Aquacultures and hydroecology;
2) Biological diversity and forest ecology;
3) Animal parasitology;
4) Coleopterology;
5) Nanobiotechnologies and nano biosafety;
6) Molecular ecology;
7) Behaviour and physiological ecology (https://du.lv/wp-content/uploads/2022/09/DU-Strategy-summary-1.pdf).

The number of SCI (Web of Science & SCOPUS) publications, funding attracted, research infrastructure, presence of a scientific group (number of PhDs, number of doctoral students), average citation index, activity in international scientific networking, upkeep of international collections and databases, and perspectives on creating have all been factors taken into consideration by DU when determining the priority directions of research in the field of biology. Expert advice on the necessity to group numerous smaller research lines around the good ones and to establish deeper ties with the national economy were taken into consideration when determining the biology research priorities. The study and protection of biological diversity, as well as interdisciplinary solutions to numerous environmental protection, health, agriculture, nano safety, energy, and resource conservation problems, are just a few of the many issues that DU scientists

make a significant contribution to solving (SAR p. 94 - 95).
The DU scientists collaborate with the community to accomplish shared objectives by contributing their knowledge and originality to discussions. Examples of collaboration include collaboration with “Corporation ‘Latvijas valsts meži’”; “Axon’ Cable ltd”; “State plant protection service”; “Nacional Botanical garden”; “Institute of Agricultural Resources and Economics”; “Latgale Zoo”; “Latvian Nature Museum”; “Latvijas maiznieks ltd”,”Rural Support Service”; “Corporation Nagļi”; “Daugavpils regional hospital”; “Nature Protection Board”; “Ecolat ltd”; “Latgale Planning Region”; “Latvian Forest Certification Council”; “Basis ltd”; “Daugmeteks ltd”, “Daugavpils City self-government”. Evidence-based research that can address a wide range of issues of public relevance may be modified or recreated based on the study's strengths and the expertise of the academic personnel. It is crucial that the study field’s staff offer students at all levels, especially those enrolled in the doctoral study programme, a cutting-edge learning environment and professional experience. IIt is crucial to include students from various study fields (such as biology, chemistry, environmental science, physiotherapy, physics, and mathematics) and academic levels (such as bachelor's, master's, and doctoral) in order to address current issues in science and, by extension, society as a whole. The scientists involved in the study field of the aforementioned study programmes make sure that the management of studies, bachelor's, master's, and doctoral theses fully complies with modern criteria. Most often, students engage in interdisciplinary research, solve challenging issues, collaborate with scientists to create novel techniques and technologies, and gain expertise in the patenting process (SAR p. 94).
Most often, students engage in interdisciplinary research, solve challenging issues, collaborate with scientists to create novel techniques and technologies, and gain expertise in the patenting process. The demand for biodiversity research in the context of nanobiotechnology, biosafety, nature protection, etc. has significantly increased, which indicates a number of global, national, and regional drivers for the development of this research direction. Unquestionably, technological advancement and the rise in demand for scientific technological solutions in the sector's associated industries (medicine, biological agriculture, energy, food production, smart materials, ecosystem services, etc.) are related to the general development trends of world science. The following directions are listed as priorities in the documents of Latvia's national economy and science development strategy because they support a number of the specializations identified within the framework of the Smart specialization strategy (Research and Innovation strategy for Smart Specialization, or RIS3): Knowledge-based bioeconomy, biomedicine, medical technology, biopharmaceutics, and biotechnology, as well as intelligent engineering systems, materials, and technologies, as well as smart energy (SAR p. 94).
The awarding of a doctoral degree is based on the achievements and findings of the relevant field of science or artistic creation of the doctoral study programme. The criteria is well met.

2.2.3. Doctoral students' study work is mainly organised as the student's independent work, working on each students doctoral thesis research, working by individual plan on the study course topics (SAR, p. 95-96). Onsite interviews with study programme director and doctoral students shows that at this moment there is a limited number of contact lectures for the students. Actual study courses with the lectures are planned with the implementation of doctoral school at DU (SAR p.87).
Study programme plan (SAR p.92, SAR annex 3.2.1. DSP Biology_Study plan_EN.xlsx) includes two examinations - one in speciality, other in English language but those two examinations do not have study course descriptions, also, doctoral students during the onsite visit informed that they are not informed about the doctoral examination, its content and the corresponding procedures.
The doctoral research adviser and the doctoral student collaborate to approve each doctoral student's unique work plan, which is not subject to external control. Doctoral candidates and doctoral students both conduct research on the subject of their doctoral theses during and after the implementation of DSP. They also publish the key findings in generally regarded peer-reviewed

scientific publications, engage in science transfer activities, and present their findings in scientific seminars, symposia, conferences, and congresses, which is indicated in the employment and scientific indicators of persons who obtained a doctor's scientific degree list. Examples include papers published in scientific journals “Fermentation”; ”Agronomy Research”; ”International Veterinary research”; “Journal of Helminthology”, “Molecules”, “Luminescence” and others. The research adviser is most frequently consulted when performing this activity. The research adviser and the structural unit where the PhD student is enrolled oversee the doctoral student's work (SAR p. 95).
The doctoral study programmes implemented by DU, including DSP "Biology," will gradually transition to a new doctoral studies model in consideration of the planned changes in the implementation of doctoral study programs in Latvia, which will be implemented on the basis of the conceptual report "On the implementation of a new doctoral study model in Latvia" (supported on June 25, 2020 by Cabinet of Ministers Order No. 345). According to the conceptual study, doctoral-level coursework should be organized at each university by doctoral schools, which are centralized structural units. The DU Doctoral School regulations, which will be developed in 2023, will ensure that the school complies with European best practices and international standards and set requirements for admission.
The recommendations made in the conceptual paper "On the introduction of a new doctoral model in Latvia" were taken into consideration when establishing the curriculum of the new DSP "Biology" with regard to the percentage of time given to research and study course acquisition. These recommendations state that credit points in doctoral study programmes should be given for the time spent on research, which accounts for about 70% of full-time study, when the doctoral student develops a doctoral thesis and internationally renowned scientific publications, and for the time spent on study courses and mobility, which accounts for about 30% of study time (SAR p. 95).
A significant portion of the study courses "Research methodology acquisition and approbation" (18CP) and "Specialization course in biology" (18CP), according to the curriculum, could be completed within the framework of the Doctoral School, including in doctoral schools organized by other Latvian and international universities, depending on the specialization chosen by the students (SAR p. 96; 3.2.1. DSP Biology_Study plan). The criteria is well met.

2.2.4. Not applicable

2.2.5. According to the Act on Scientific Activity of the Republic of Latvia, the Act of Higher Education Institutions of the Republic of Latvia, and the Cabinet of Ministers Decision of December 27, 2005 No. 1001 concerning the "Procedure and criteria for the awarding of a doctoral degree (promotion)", the doctorate promotion process at DU is carried out. The "Regulations on Daugavpils University Promotion Councils" govern the general founding promotion council and promotion procedure at the university, while the "Regulations in Daugavpils University Promotion Council in Biology" govern the founding promotion council and promotion procedure in biology. The authorized doctoral study programme "Biology" serves as the foundation for how the DU Promotion Council in Biology operates. There are 14 scientists with Latvia Council of Science (LCS) expert rights in biology that make up the permanent makeup of the doctoral council, as stated in the Regulations on the Daugavpils University Promotion Council in Biology. Two scientists from the biological subfield in which the doctoral thesis is defended must be members of the Promotion Council in Biology. Direct relatives of experts are excluded from the Promotion Council in Biology's permanent membership. With DU rector's directive No. 4-4/28, the current Promotion Council in Biology's membership was approved on February 27, 2018, and it consists of 11 specialists (SAR p. 96; https://likumi.lv/ta/id/124787-zinatniska-doktora-grada-pieskirsanas-promocijas-kartiba-un-kriteriji; https://du.lv/wp-content/uploads/2021/05/Nolikums-par-DU-Promocijas-padomem-1.pdf; https://du.lv/wp-content/uploads/2021/05/Biologijas_promocijas_padomes_nolikums1.pdf;

https://du.lv/zinatne/promocija/promocijas-padomes/biologijas-promocijas-padome/; https://du.lv/promocijas-darbi/pazinojums-par-promocijas-darba-aizstavesanu-rolands-moisejevs/).
The developed doctoral thesis is reviewed in the structural unit where it was developed before being submitted to the Department of Sciences at DU. The doctoral thesis is submitted to the Department of Sciences at DU, which delegated the duty of reviewing the doctoral thesis to the promotion council of the relevant branch of science, if the structural unit determines after reviewing the work that it has been elaborated in accordance with the requirements. The promotion council makes decisions regarding the advancement of the thesis for public defense and the selection of three reviewers within a month of receiving the doctoral thesis. The reviewers participate in the work of the promotion council, which was established by the institution and authorized by the rector's order for the defense of the specific doctoral thesis, in the event that the State Scientific Qualification Commission (SSQC) makes a favorable decision. The announcement of the doctoral thesis defense includes posting the information (including the doctoral thesis summary) on the DU website so that anyone interested can familiarize themselves with it. The rector of DU may order additional scientists who hold LCS expert rights in the pertinent sub-branch of biological science to the Promotion Council in Biology for each specific defense of a doctoral thesis, upon the recommendation of the head of the Promotion Council in Biology and the proposal of the vice-rector of science. The Promotion Council decides whether to grant or deny the degree by a majority vote in an open meeting after hearing the doctorate candidate's and reviewers' reports and discussing the relevant scientific literature. The DU Department of Science manages the Promotion Council's activity. If the applicant receives a PhD degree within two full calendar years of finishing the theoretical studies, the costs of the promotion process for graduates of DU doctoral study programmes are covered from the funds designated for the implementation of the doctoral study programme. The DU Council of Science will decide whether to allocate funds to cover the costs of the promotion process if the candidate for a doctoral degree has not finished the relevant doctoral study programme at DU or has completed it more than two full calendar years ago without receiving a degree (SAR p. 96).
(SAR Annex 3.2.1. DSP_Compliance of the biology doctoral programme with external regulations.docx). The criteria is well met.

2.2.6. Doctoral thesis topics are selected by students in cooperation with their research advisors and the study programme director. The relevance of the thesis advisor's scientific background to the field-specificity of the topic selected for the doctoral thesis is assessed by the study programme director. Research advisors or consultants from foreign scientific institutes who have relevant scientific experience in the doctoral thesis's chosen topic are frequently recruited to help with its development. The Doctoral Council of DU approves the thesis topic and advisor. The doctorate student's research adviser arranges for all necessary consultations with DU and outside university experts (SAR p. 98).
The selection of reviewers from the relevant field is crucial during the doctorate thesis defense procedure in order to assure the quality of doctoral theses. In accordance with the rules of the Daugavpils University Promotion Council in Biology, the chair of the council appoints three reviewers for the work after it has been submitted to the council, one of whom is a council expert in the relevant sub-branch of science, and two are sub-branch experts from other scientific institutions or organizations (preferably outside Latvia) (SAR p. 98).
Up to now, the DU Promotion Council in Biology has served as the defense venue for all doctoral theses created under the auspices of the DU DSP "Biology". A total of 12 doctorate theses in biology were successfully defended at the DU Promotion Council between 2017 and 2022. The topics of the doctoral theses defended during the reporting period (for example, lichens and allied fungi in Latvia; homeothermic and poikylothermic animals helmintofauna in Latvia, impact of various nanoparticles on plants; lindes genus taxa in Latvia, etc.) were related to numerous sub-branches of biology,

biotechnologies, and other disciplines, and they were in line with current trends in modern biological science (SAR p. 98; 3.2.5_Doctoral thesis defended).
It is important to mention that 11 out of the 12 people who successfully defended their doctoral theses during the reporting period are currently employed in various scientific or higher education institutions in Latvia or abroad, continuing the research they began for their doctoral theses, demonstrating the high caliber of instruction offered in DU DSP "Biology". The doctors of biological sciences who receive their education at DU contribute to the expansion of knowledge in that subject, which has a substantial positive impact on the growth of the national economy (SAR p. 99; Annex 3.1.3. Employment and scientific indicators Doctors degree).
The criteria is well met.

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

The subject matter of the DSP "Biology" is concentrated on acquiring the skills required for the branch of biology science, contemporary scientific theories and ideas, and research procedures. The study content is in line with the demands of science, the job market, and current developments in business. The requirements set regarding the publication of research results in internationally indexed scientific publications and participation in international scientific conferences develop students' capacities to independently perform critical analysis, synthesis, and evaluation of scientific information as well as to complete significant research or innovation tasks. The goal of the study programme is to prepare highly competent specialists and biologists who can formulate and address the most pressing issues in contemporary biology. The doctoral study programme strongly contributes to “Daugavpils University development strategy for 2015.-2020”. The DU scientists collaborate with the local and international community to accomplish shared objectives by contributing their knowledge and originality to discussions. Students have clearly defined promotion, doctoral theses defense) opportunities. Doctoral thesis topics are selected by students in cooperation with their research advisors and the study programme director. The relevance of the thesis advisor's scientific background to the field-specificity of the topic selected for the doctoral thesis is assessed by the study programme director. Research advisors or consultants from foreign scientific institutes who have relevant scientific experience in the doctoral thesis's chosen topic are frequently recruited to help with its development. The doctors of biological sciences who receive their education at DU contribute to their high employability and expansion of knowledge, which has a substantial positive impact on the growth of the national economy. The study programme includes doctoral examinations, but the doctoral students are not informed about the procedures and content.

Strengths:
1. The doctoral study programme strongly contributes to “Daugavpils University development strategy for 2015.-2020”.
2. Large amount of time given to research and study course acquisition.
3. Well-applied student-oriented approach.
4. Research advisors or consultants from foreign scientific institutes who have relevant scientific experience in the doctoral thesis's chosen topic are frequently recruited to help with the doctoral thesis development.
5. Successful employability of the students with doctoral degree, as 11 out of the 12 people who successfully defended their doctoral theses during the reporting period are currently employed in various scientific or higher education institutions in Latvia or abroad.

Weaknesses:
1. Some of the study courses do not have study course descriptions in Latvian and English and there

is no clear information about if and how are they organized
2. There is no clear information about the doctoral examination for the students.
3. No study courses for developing pedagogical skills are available for PhD students.

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

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

Assessment of compliance: Fully compliant

The teaching staff has practical expertise in the execution of research projects and contract work connected to the life sciences in addition to their academic work at the institution. This kind of activity helps to develop a thorough awareness of the particulars of the sector, guaranteeing a clear separation between theory and practice throughout the learning process. The ambitions of the academic staff members involved in the study programme are to successfully administer the study programme and they frequently connect to the lecturer's area of expertise within the program.

SAR Annexes
2.4.3. Participation in projects, 2.5.1. Cooperation partners
3.1.3. Employment and scientific indicators Doctors degree
3.2.5 Doctoral thesis defended

International assessment of the activity of science institutions. Available: https://www.izm.gov.lv/lv/media/10705/download?attachment

2.3. Resources and Provision of the Study Programme

Analysis

2.3.1. To ensure the successful execution of the DSP "Biology" study programme at DU, significant investments have been made in the acquisition of advanced scientific equipment and materials expressly tailored for educational and research purposes (SAR p. 99-101). Overall material and provisional support for DSP "Biology" study programme is comparable with that of ABSP "Biology", which can be reviewed in more detail in this report's corresponding chapter of the ABPS “Biology” (43421).
There is a possibility for doctoral students to enter DU organized research competitions to secure additional funding for research goals and receive funding to develop their practical, scientific, and project managing skills and ultimately publish results in Web of Science and/or SCOPUS databases. The right to submit individual or research group projects to the competition is the right of representatives of the academic and scientific staff working on the basis of an employment contract: professors, associate professors, assistant professors, leading researchers, researchers, lecturers, assistants, research assistants, doctoral students and applicants for a doctoral degree (SAR p. 35-36). In 2023 eighteen projects were approved of which nine were in the study field of wildlife sciences. Research subjects were in a broad spectrum ranging from plant biodiversity to diptera behavior analysis (https://du.lv/aktualitates/apstiprinati-daugavpils-universitates-petniecibas-projektu-konkursa-2023-gada-rezultati/).
Additionally, DU provides its doctoral students with access to an array of structural units, including the Institute of Life Sciences and Technologies, which encompasses the Department of

Biotechnologies, Department of Biosystematics, Department of Ecology, DU Study and Research Center "Ilgas," Department of Technologies, and Department of Applied Chemistry. Furthermore, students have the opportunity to engage with the DU Agency, "Latvian Institute of Hydroecology." (annex 2.3.2. Infrastructure and material and technical provision_EN.docx).
In an effort to expand research opportunities for doctoral students, DU has established collaborative relationships with various international partners, such as CETAF (Consortium of European Taxonomic Facilities), GBIF (Global Biodiversity Information Facility), NACEE (Network of Aquaculture Centers in Central-Eastern Europe), and others. These partnerships provide DU researchers and students with broader access to scientific collections and databases in Europe and around the world (SAR p. 99-101).

2.3.2. Students enrolled in the doctoral study programme at DU benefit from a comprehensive academic and scientific framework, replete with requisite resources, meticulously designed to ensure the attainment of their academic objectives and the successful pursuit of their doctoral research endeavors. In cases where students require access to specialized scientific equipment or analytical tools for the advancement of their doctoral theses, collaborative solutions are actively explored, often involving partnerships with esteemed scientific institutions (SAR p. 100-101). In the previous reporting period students of DSP "Biology" were provided with access to specific scientific equipment at the Latvian State Institute of Forestry "Silava", the Institute of Biology of the Lithuanian Academy of Sciences, the University of Tartu for the purposes of scientific advancement and furtherment of doctoral thesis (SAR Annex 3.2.5_Doctoral thesis defended_EN.docx).
In accordance with DU dedication to cultivating a global outlook and enhancing research prospects, students at DU are granted exclusive access to a network of international partners and distinguished scientific institutions. These collaborative associations offer a myriad of research avenues, facilitating connections with diverse scholars and mentorship possibilities. For instance, doctoral students have the privilege of engaging with esteemed colleagues in Lithuania, Estonia, and Poland. These partnerships serve as invaluable channels for collaborative research and contribute novel insights to the formulation of doctoral thesis projects. It is imperative to note that doctoral students are not confined solely to the resources and faculty available at DU, rather, they have the opportunity to tap into a vast reservoir of global expertise. (SAR Annex 3.2.5_Doctoral thesis defended_EN.docx).

2.3.3. DU primarily relies on funding from the Ministry of Education and Science, with allocation dependent on specific criteria including student enrollment, the level of study programmes, and the priority of the study field. The subsequent financial disbursement is centralized and administered by the DU Department of Finance and Accounting, as detailed in the Self Assessment Report (SAR, p. 101-102).
The calculated cost per student for an academic year amounts to 9284.34 EUR, from which 92,5 % are salaries and tax, 5,5% for equipment, materials and books , and 2 % for student services and travel expenses and it would ostensibly cover all expenses of the study programme. DU does not have a minimum number of students for doctoral study programmes.
The data presented in the attached annex (SAR Annex 3.1.4 - DSP Biology Statistical Data Students_ENG.xlsx) shows that over the last six years the number of doctoral students has been consistent and stable.

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

DU boasts a comprehensive doctoral study programme in the field of biology. Students are provided with a variety of specialized material and academic support, as well as opportunities to develop their thesis with international partners. Study programme is well established with a steady number of

participants.

Strengths:
1. State-of-the-art, well-equipped academic and research facilities.
2. A meticulously planned and impeccably maintained library.
3. Thoughtful measures taken to accommodate students with special needs.
4. Comprehensive network of local and international partners to facilitate research opportunities.

Weaknesses: Not identified

Assessment of the requirement [6]

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

Assessment of compliance: Fully compliant

Informative, material and technical provision and financial provision correspond with the conditions for the implementation of the study programme

2.4. Teaching Staff

Analysis

2.4.1. The academic staff participating in the Doctoral Studies (DSP) "Biology" at the Faculty of Natural Sciences and Mathematics have various qualifications to implement the programme. When the Self-Assessment Report (SAR) was prepared, 15 very good academic staff members contributed their knowledge to this programme.
Each faculty member holds the requisite degree in their field, demonstrating their deep understanding and knowledge of the subject. These qualifications are not purely academic but reflect a broader spectrum of competencies, including pedagogical knowledge, research proficiency, and ongoing commitment to professional development.
In the context of pedagogical competencies, lecturers have been trained in teaching methods conducive to higher education, especially at the doctoral level. They are adept at developing critical thinking, facilitating advanced discussions, and guiding students through the complex problem-solving tasks that are integral to the study of biology.
From a scientific point of view, the faculty boasts an impressive number of publications in peer-reviewed journals, which proves its active involvement in the life of the scientific community and contribution to the development of knowledge in its fields. Their research interests are diverse and cover important areas of biology consistent with programme goals, providing students with exposure to the frontiers of biological research.
In addition, the faculty's compliance with the rigorous requirements set out in legal acts ensures that the study programme complies with national and international academic standards. Their ability to translate these requirements into a robust curriculum highlights their ability to provide a relevant and high-quality study programme.
The successes of its students also prove the effectiveness of the academic staff. Doctoral students under their supervision can boast of completing their doctoral theses on time, publishing applications in renowned journals and presenting their works at prestigious conferences. This success rate demonstrates the department's commitment to mentoring its students to achieve their full academic and career potential.
Regarding professional development, faculty remain active in the academic community by

participating in workshops, symposia, and ongoing educational opportunities. This commitment to lifelong learning ensures they stay current with evolving trends and discoveries in biology.
Finally, the faculty's commitment to international collaborations and efforts to provide students with internship and conference opportunities abroad demonstrate their understanding of the importance of global engagement in research.
To sum up, the qualifications of the DSP "Biology" academic staff are multi-faceted and include academic degrees, pedagogical knowledge, research activities, professional development and an international perspective. These features combine to ensure that the study programme meets and exceeds the educational goals and outcomes anticipated for this study programme.
Most of the (14) teaching staff involved in implementing the study programme are experts of the Latvian Scientific Council in the field of biology.
Three members of the teaching staff involved in the implementation of the study programme declare their knowledge at B1 level (all or part of the skills - written, spoken or reading) (SAR Annexe 2.3.7.CV of academic staff_EN).

2.4.2. Since the previous accreditation of the study field, there have been no changes in the composition of the teaching staff in terms of conducting compulsory courses and specialized optional courses. The design of the teaching staff changed only in connection with enrollment and the high school leaving examination, and the supervisors of doctoral theses involved in the implementation of the study programme also changed accordingly.

2.4.3. During the reporting period, academic staff were involved in 35 scientific and applied projects. For example, one of the senior researchers is currently supervising (PI) the project “Estonian Science Agency Project PUT1223 “Where does personality come from? Characterizing the Development and Adaptive Value of Phenotypic Variation in Variable Environments”. Then other one took part in the project "IUT36-2 "Sustainable crop protection: using ecosystem services for crop production", Estonian". According to the collected data and on-site meetings, academic staff and visiting lecturers consciously and regularly engage in various professional development activities (i.e scientific seminars, international conferences and workshops, short scholarships) in areas corresponding to their scientific careers and interests at domestic and foreign universities. In addition to academic work at the university, the academic staff has practical experience in implementing industry projects and contract work, for example, contract work for Latvian State Forests for the development of a reconstruction plan for the Skriveri Arboretum; contract work for Natura Conservation Agency on monitoring of invertebrates, amphibians and reptiles; contract work for Institute of Agrarian Economics on the research of beetles (SAR, p. 105-109). This type of activity contributes to a comprehensive understanding of the specificity of the industry, thus ensuring direct unity of theory and practice in the study process.

2.4.4. It is important to highlight that the teaching staff who supervise doctoral theses have noteworthy publication records, which serve as proof of their expertise and dedication in their respective fields. However, it is crucial to acknowledge that not all supervisors have achieved the same level of success in terms of publications (but still all the members of the teaching staff have at least one publication during the evaluation period). Therefore, it becomes imperative to support and encourage their efforts in order to enhance their publication achievements. For example, three of the most active members of the teaching staff have achieved significant scientific success with over 74, 50 and 24 scientific articles. Other scientists typically publish a dozen or several publications during the assessed period.

2.4.5. Faculty members associated with the doctoral study programme have established a robust and formalized framework for mutual collaboration that is integral to achieving the study

programme's academic goals and ensuring curriculum coherence. This structured collaborative mechanism is characterized by a series of thoughtful and strategic activities underpinning the study programme's pedagogical and research effectiveness.
Academic staff gather in a formal meeting at scheduled intervals to support a participatory decision-making approach. These meetings aim to systematically review and manage the curriculum, ensuring that faculty's collective knowledge is leveraged to maintain a modern and comprehensive educational offering. This shared decision-making process reflects a commitment to academic excellence and is crucial in developing a unified teaching strategy.
There is a thorough procedure for assessing and improving teaching content in curriculum development. Faculty members contribute to this process through scientific discourse based on evidence-based practices and current scientific insights. The result is a curriculum that not only reflects the core learning outcomes of the study programme but is also closely linked within and across courses, providing students with a seamless educational narrative.
The organization of scientific events is approached with a similar level of formality and cooperation. Faculty members engage collaboratively in the conceptualization, planning, and implementation of these events, ensuring that they serve as effective forums for disseminating scientific knowledge and promoting intellectual exchange.
In collaborative research, collaborative faculty efforts are characterized by strategic partnerships and scholarly activities. The implementation of joint research projects, co-authorship of scientific publications and coordinated presentation of results at academic conferences indicate a vibrant research culture supported by faculty collaboration. These activities improve the program's research profile and provide doctoral students with a dynamic learning environment.
Moreover, the department's collaborative efforts include strategic alliances with external academic and research institutions. These alliances strengthen the educational and research dimensions of the program by providing additional expertise, resources and opportunities for students to engage with the broader research community.
In summary, the organized mechanism for faculty collaboration within the curriculum is a testament to the institution's commitment to academic integrity and research excellence. Through this formalized collaborative ethos, the program ensures that it achieves its educational goals and that course offerings are effectively interconnected, thus establishing a solid foundation for scientific activity and innovation.

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

The academic staff consists of experienced and scientifically active people. Most of the teaching staff involved in the implementation of the study programme are experts recognized by the Latvian Scientific Council in the field of biology. Their expertise provides doctoral students with high-quality educational and research opportunities. They offer a diverse range of research topics that are attractive to PhD students. These topics have been carefully designed to provide valuable insights and contribute to scientific progress. In addition, they try to cultivate a friendly atmosphere at faculty, conducive to good communication between supervisors and doctoral students. This will ensure that guidance and support are readily available throughout the research process.

Strengths:
1. Experienced and scientifically active academic staff.
2. Most of the teaching staff members involved in implementing the study programme are experts of the Latvian Scientific Council in the field of biology.
3. Offer of the research topics are attractive to doctoral students, friendly atmosphere and good communication between the supervisor and the doctoral student (information from discussion during on-site meetings with PhD students).

Weaknesses:

1. Not all members of the teaching staff have English language skills at least at level B2

Assessment of the requirement [7]

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

Assessment of compliance: Fully compliant

The teaching staff consists of experienced and scientifically active people with publications in scientific journals. Most of the teaching staff members have Latvian Science Council expert status.

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: Not relevant

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: Partially compliant

Study course descriptions are prepared in Latvian and English languages and contain all the parts necessary according to the Law in Higher Education Institutions (Annex 3.2.1.DSP_Study course descriptions_EN). As the compulsory literature are scientific articles, it is suitable for the study programme implementation in Latvian and English. There are no study course descriptions for the study courses: Elaboration of doctoral thesis, Doctoral examination in speciality, Doctoral examination in English, Civil defense, Environmental protection.

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

Assessment of compliance: Fully compliant

The issued diploma complies with the state regulation - Cabinet of Ministers regulation No. 202 “Procedures by which documents certifying higher education recognition by the State shall be issued” (SAR annex 3.1.2.DSP Biology_Diploma and transcript_EN)

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

Assessment of compliance: Fully compliant

There are at least 5 associate professors and professors of the DU involved in the implementation of the study programme (SAR annex 2.3.7. Basic information about teaching staff_EN.xlsx).

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: Fully compliant

There are 14 members of the teaching staff involved in the implementation of the doctoral study programme who are experts approved by the Latvia Science Council in the field of Natural sciences - biology (SAR Annex 3.4.1.Statement of eksperts_EN.docx)

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

All of the teaching staff involved in the implementation of the study programme are proficient in the official language (native language or the knowledge level of C1 or C2) (SAR Annexes 2.3.7.Basic information about teaching staff_EN.xlsx and 2.3.7.Statement_native language_EN.docx)

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: Partially compliant

Most of the teaching staff involved in the implementation of the study programme have an English language level of at least B2 but at least three of the teaching staff members have part of the language skills (written, spoken or reading) evaluated as only B1 (SAR Annexes 2.3.7.CV of academic staff_EN and 2.3.7.Basic information about teaching staff_EN.xlsx)

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

Assessment of compliance: Fully compliant

Study agreement complies with the national legislation and includes all the necessary parts (SAR Annex 3.1.2.DSP Biology_Agreement on studies_EN.docx)

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

DU has an agreement with the University of Latvia about the possibility of continuing studies in a similar study programme (Doctoral study programme Natural sciences - this study programme incorporates also biology studies) (SAR Annex 2.1.4.Agreement between LU and DU_translation_EN.docx). As the studies at the doctoral level at the University of Latvia are in Latvian and in English, possibilities to continue studies are provided for all students.

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

DU has provided confirmation signed by the rector of the university that students are guaranteed compensation for losses (SAR Annex 2.1.4.Statement_Compensation guarantee for students_EN.docx)

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 study programme partially complies with the requirements set forth in the Law on Higher Education Institutions as not all members of the teaching staff have English language knowledge level B2 and some study courses do not have study course descriptions.

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

DSP "Biology" complies well with the study field and current formal requirements, except study course descriptions. The number of students that enroll each year is stable, but the number of graduates must be higher. In the near future all DSP programmes in Latvia, including DSP "Biology" will face serious challenges due to the conceptual report "On the implementation of a new doctoral study model in Latvia". The study content is in line with the demands of science, the job market, and current developments in business. The doctoral study programme strongly contributes to "Daugavpils University development strategy for 2015.-2020". The DU scientists collaborate with the local and international community to accomplish shared objectives by contributing their knowledge and originality to discussions. The study programme includes doctoral examinations, but the doctoral students are not informed about the procedures and content. The doctors of biological sciences who receive their education at DU contribute to their high employability and expansion of knowledge, which has a substantial positive impact on the growth of the national economy. Students

are provided with a variety of specialized material and academic support, as well as opportunities to develop their thesis with international partners. The academic staff consists of experienced and scientifically active people. Their expertise provides doctoral students with high-quality educational and research opportunities. They offer a diverse range of research topics that are attractive to PhD students. In addition, they try to cultivate a friendly atmosphere at faculty, conducive to good communication between supervisors and doctoral students.
The study programme is almost ready to be implemented also in English if the teaching staff with an English language skills level of at least B2 is provided.

Strengths:
1. Study programme offers an opportunity to specialize very well at a doctoral level in specific subfields in biology.
2. Research advisers or consultants from foreign scientific institutes who have relevant scientific experience in the doctoral thesis's chosen topic are frequently recruited to help with doctoral thesis development.
3. Successful employability of the students with doctoral degree, as 11 out of the 12 people who successfully defended their doctoral theses during the reporting period are currently employed in various scientific or higher education institutions in Latvia or abroad.
4. State-of-the-art, well-equipped academic and research facilities.
5. A meticulously planned and impeccably maintained library.
6. Thoughtful measures taken to accommodate students with special needs.
7. Comprehensive network of local and international partners to facilitate research opportunities.
8. Experienced and scientifically active academic staff.

Weaknesses:
1. Study programme lack flexibility due to the length and content of it.
2. Number of graduates in much lower than number of students that enroll each year.
3. Study programme offers specialization in certain subfields of biology (same as in their strategy) and it may be hard to develop PhD thesis in other subfields.
4. Some of the study courses in Latvian and English do not have study course descriptions and there is no clear information about if and how are they organized.
5. There is no clear information about the doctoral examination for the students.
6. Not all members of the teaching staff have English language skills at least at level B2.
7. No study courses for developing pedagogical skills are available for PhD students.

Evaluation of the study programme "Biology"

Evaluation of the study programme:

Good

2.6. Recommendations for the Study Programme "Biology"

Short-term recommendations

1) Prepare study course descriptions for all study courses until the study quality commision decision is made.
2) Develop a strategy to improve communication from DU about guest lectures, different opportunities, process of studies etc. with doctoral students about the different PhD studies processes, within the next two years.

3) Process of doctoral examination should be made clearer and a system on how to help students to prepare in good time should be introduced, within the next two years.
4) Before implementing the study programme in English ensure that all members of teaching staff have English language skills at least at level B2.

Long-term recommendations

1) Develop and implement a plan to reduce dropout of the students and increase the number of defended thesis (during next accreditation period).
2) Consider attracting new members of the academic staff to provide possibilities for the PhD students to choose topics in more diverse range of biology subfields (during next accreditation period).
3) Evaluate the possibility to change lengths of the study programme to give more time for the PhD students to do research and publish results (during next accreditation period).
4) Include in the study programme the study courses for developing pedagogical skills for PhD students (within three years).

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:		Partially compliant		There is a partial compliance with the Law on Higher Education Institutions as there is missing systematic approach to development of methodological skills (Section 5, Paragraph 2., point 4)), as well as problems with transparency of the feedback ((Section 5, Paragraph 2., point 1))). (SAR chapter on quality assurance, SAR annex 1.3_List of Regulations for internal quality assurance.pdf, onsite visit)

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)		Partially compliant		The study profile was found to be highly consistent with the direction of the research being conducted. However, around 30% of teaching staff are not involved in international projects in the field of scientific research. Only around 10-30% of teaching staff is involved in mobility programme. Also not all of the teaching staff members have scientific publications.
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			Within the context of the study field, the DU collaborates with foreign institutions, and this collaboration helps to achieve the objectives and learning outcomes of the study field and the pertinent study programmes. SAR Annexes: 2.5.1.Cooperation partners_EN.docx; 2.5.3.Statistics on foreign students and lecturers_EN.docx; 2.5.3.Incoming and outgoing mobility DU students_EN.docx; 2.5.3.Incoming and outgoing mobility academic staff_EN.docx https://du.lv/en/news/apply-for-erasmus-studies-and-traineeship-scholarship/%20;%20, https://du.lv/en/studies/study-programmes/%20, https://www.study%20in%20latvia.lv/universities/daugavpils-university,%20, https://www.study.eu/university/daugavpils-university).
R4 - Elimination of deficiencies and shortcomings identified in the previous assessment of the study field, if any, or implementation of the recommendations provided.		Partially compliant		University has implemented some of the received recommendations, but a significant part of them has not been implemented in essence.

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	Biology (43421)	Not relevant	Fully compliant	Partially compliant	Partially compliant	Average
2	Biology (45421)	Fully compliant	Fully compliant	Partially compliant	Partially compliant	Good
3	Biology (51421)	Fully compliant	Fully compliant	Fully compliant	Partially compliant	Good

The Dissenting Opinions of the Experts

N/A