

**Decision Regarding Assessment of the Architecture and Building Study Programme Group
Estonian University of Life Sciences**

12/06/2017

The Quality Assessment Council for Higher Education of the Estonian Quality Agency for Higher and Vocational Education decided to approve the report by the Assessment Committee and to conduct the next quality assessment of the Architecture and Building study programme group in the first and second cycles of higher education at the Estonian University of Life Sciences in seven years, with a secondary condition

On the basis of subsection 10 (4) of the Universities Act and points 41.1 and 42 of the document, 'Quality Assessment of Study Programme Groups in the First and Second Cycles of Higher Education', authorised in points 3.7.3 and 3.7.1 of the Statutes of the Estonian Quality Agency for Higher and Vocational Education; the Quality Assessment Council for Higher Education of EKKA (hereinafter referred to as 'the Council') affirms the following:

1. On 14.03.2016 the Estonian University of Life Sciences and EKKA agreed upon a time frame to conduct a quality assessment of the study programme group.
2. The Director of EKKA, by her order on 15.02.2017, approved the following membership of the quality assessment committee for the Architecture and Building study programme group in the first and second cycles of higher education at Tallinn University of Technology, Estonian University of Life Sciences, TTK University of Applied Sciences and Estonian Academy of Arts (hereinafter referred to as 'the Committee'):

Matti Rautiola	Chair of the Committee – Professor, Architect, Director General, ARRAK Architects Kiiskilä, Rautiola, Building Information Foundation (Finland)
Hermann Blum	Student, ETH Zürich, ESU (Switzerland)
Philippe Bouillard	Professor, Université Libre de Bruxelles (Belgium)
Ardi Van Den Brink	Professor of Landscape Architecture, Wageningen University (Netherlands)
Emma Järvenpää	Student, Leiden University (Netherlands)
Tiit Kerem	CEO, AS Telora-E (Estonia)

Juris Rihards Naudžuns	Professor, Riga Technical University (Latvia)
Herman Neuckermans	Professor Emeritus, KU Leuven, Department of Architecture (Belgium)
Mark G. Richardson	Deputy Vice President for Global Engagement, University College Dublin (Ireland)
Paul Rullmann	Chairman of the WTR, the Scientific Technical Council of SURF (Netherlands)

3. The Estonian University of Life Sciences submitted the following study programmes for evaluation under the Architecture and Building study programme group:
 - Geodesy (integrated BSc&MSc)**
 - Hydraulic Engineering and Water Pollution Control (integrated BSc&MSc)**
 - Geodesy, Land Management and Real Estate Planning (BSc)**
 - Land Management and Real Estate Planning (MSc)**
 - Geodesy (MSc)**
 - Landscape Architecture (MSc, taught in Estonian and in English)**
4. The Estonian University of Life Sciences submitted a self-evaluation report to the EKKA Bureau on 13.12.2016 and the assessment coordinator forwarded it to the Committee on 21.12.2016.
5. An assessment visit was made to the Estonian University of Life Sciences on 16.03.2017.
6. The Committee sent its draft assessment report on the Building study programmes to the EKKA Bureau on 26.04.2017, EKKA forwarded it to the Estonian University of Life Sciences for its comments on 5.05.2017, and the University delivered its response on 19.05.2017. The Committee sent its draft assessment report on the Architecture study programmes to the EKKA Bureau on 2.05.2017, EKKA forwarded it to the Estonian University of Life Sciences for its comments on 12.05.2017, and the University delivered its response on 29.05.2017.
7. The Committee submitted its final assessment report on the Building study programmes to the EKKA Bureau on 24.05.2017. The Committee submitted its final assessment report on the Architecture study programmes to the EKKA Bureau on 5.06.2017. Those assessment reports are integral parts of the decision, and are available on the EKKA website.
8. The Secretary of the Council forwarded the final assessment reports along with the University's self-evaluation report to the Council members on 5.06.2017.
9. The Council with 10 members present discussed these received documents in its session during 11–12.06.2017 and, based on the assessment reports, decided to point out the following strengths, areas for improvement, and recommendations regarding the Architecture and Building study programme group in the first and second cycles of higher education at the Estonian University of Life Sciences.

A general recommendation for the higher education institutions (HEIs) regarding the Architecture and Building study programme group

Collaboration among departments of architecture and building in different Estonian HEIs should be significantly improved in order to use the scarce available resources as efficiently as possible and thereby support development of the broad area of study of architecture and building at the national level.

General recommendations for the HEIs regarding the BUILDING study programmes

- 1) The Building study programmes should be marketed in a more professional way, including providing better information on the study programmes, showing the profession of civil engineers in a more attractive light, and changing attitudes that have significantly reduced the number of female applicants.
- 2) The HEIs should develop policies regarding pedagogical training for all academic staff and introduce mandatory pedagogical leadership trainings for those who coordinate the study programmes.
- 3) The HEIs should significantly increase internationalisation of the study programmes by simplifying international student mobility in collaboration with employers, by offering alternative mobility paths to students, by ensuring credit transfers to avoid a longer duration of studies, by introducing courses taught in English and by improving the attractiveness of study programmes to international students (e.g. launching study programmes taught in English).
- 4) The students should be more involved in research projects.
- 5) The dropout rate problem should be addressed at both national and programme levels:
 - i. The Ministry of Education and Research, HEIs and professional associations should collaborate to identify the primary systemic reasons students drop out and then collectively eliminate those reasons.
 - ii. In parallel, at the programme level, efforts should be continued to implement action plans for reducing dropout rates: include engineering subjects in syllabi during the first years of study, render the learning outcomes of core mathematics and physics modules to be more engineering focused, involve the best teaching staff in the first year, make maximum use of e-learning, make teaching more student-centred, etc.
- 6) The HEIs should develop clear staff development policies based on each HEI's values and expectations with regard to high-quality teaching. Those values and expectations should also be reflected in the selection and promotion criteria for the teaching staff.

The BUILDING study programmes at the Estonian University of Life Sciences

- 1) Outbound student mobility is relatively low due to lack of student interest. The value of an international experience to employers should be more clearly emphasised to students.
- 2) In order to reduce academic fraud, examinations should be based on procedures that are uniform for the whole University, independent of departments. The cases of academic fraud should also be addressed at the institutional level.
- 3) Small-size courses can pose a threat to the coherence of study programmes.
- 4) The University should pay special attention to the needs of staff members who are completing their PhDs – for example, to formalise the existing agreements on reduction of teaching loads and the possibility of sabbatical leaves.

Geodesy, Land Management and Real Estate Planning (BSc), Geodesy (MSc), Land Management and Real Estate Planning (MSc)

Strengths

- 1) The study programmes are amended very quickly in line with changes in the technological and legal framework regarding geodesy and land management.
- 2) Teaching staff are innovative, and their teaching has been recognised by awards. Students are very satisfied with their teachers.

Areas for improvement and recommendations

- 1) The BSc programme currently contains only eight subjects that are clearly identified with the Architecture and Building study programme group. The proportion of the technical subjects associated with the Building and Architecture study programme group needs to be increased.
- 2) The coherence of the study programmes should be improved by reducing overlaps in their contents. Study programme managers as well as students should critically review the sequence of courses.
- 3) Cutting-edge infrastructure and lecturers' expertise should be fully exploited in order to win more externally funded research projects, thereby supporting staff development.

Civil Engineering (Rural Building) (integrated BSc&MSc), Hydraulic Engineering and Water Pollution Control (integrated BSc&MSc)

Strengths

- 1) With regard to the Civil Engineering (Rural Building) study programme, theoretical subjects are supported by practical and laboratory work. Practical trainings are arranged in collaboration with construction and designing companies, as well as with manufacturers of building materials and structures.
- 2) With regard to the Hydraulic Engineering and Water Pollution Control study programme, theory and practice are well balanced and complement each other.
- 3) The Structures Laboratory, renovated in 2013, provides broader testing capabilities. Next to the Structures Laboratory the large Hydraulic Laboratory has been built. The laboratories are well equipped with test devices and equipment and are constantly modernised.
- 4) Optimal use is made of teaching staff resources due to collaboration among institutes.
- 5) Master's theses demonstrate high-level research (including international literature review and citation).
- 6) The teaching staff collaborate with regional construction companies and professional associations.
- 7) The ratio between staff and student numbers meets international standards.

Areas for improvement and recommendations

- 1) If the University wishes to encourage both outgoing and incoming international mobility, it will be essential to include more courses taught in English in the study programmes, involve more English-speaking international lecturers, improve language proficiency of the core staff and also prepare the University for internationalisation in a cultural and organisational sense.
- 2) In the process of developing study programmes, both the rapid developments in the working world and the feedback from all stakeholders (teaching staff, students and employers) must be taken into account. This ensures integration and coherence of the different courses.
- 3) The Estonian Association of Civil Engineers has granted the Estonian University of Life Sciences the right to award a primary diploma civil engineer (level 7) qualification, but it is not quite clear whether the study programme (in English 'Civil Engineering'; in Estonian 'Maaehitus', i.e. 'Rural Building') is in accordance with international minimum requirements for civil engineers – for example, the study programme does not give emphasis to geotechnical engineering or construction of infrastructure (bridges and tunnels). The institute should review the study programme and separately itemise the objectives and learning outcomes with regard to the fields of civil engineering and rural building.
- 4) The main areas of improvement for the Hydraulic Engineering and Water Pollution Control study programme arise from the same situation – a good learning environment, but too few students. That necessitates an efficient use of resources and serious reflection upon the content and organisation of the study programme:
 - i. A larger number of part-time staff should be involved in research activities.

- ii. Visibility of the study programme among other similar programmes should be improved.
 - iii. Ways to use staff resources more efficiently should be sought in order to achieve both teaching and research objectives.
 - iv. Meetings with the teaching staff from other departments should be held at the end of each semester.
 - v. Shortcomings in the content and teaching methods of the courses should be analysed and then eliminated.
 - vi. Employer feedback and changes in professional standards should be analysed and taken into account.
 - vii. Coherence of the study programme should be improved by collaborating with other institutes and by involving outside lecturers.
- 5) Students should be encouraged to more actively provide feedback on the study programme and learning environment.
 - 6) With regard to the Hydraulic Engineering and Water Pollution Control study programme, the facilities for field work should be improved – agreements with landowners are needed, for example, for drainage works and small hydropower plants.
 - 7) The Hydraulic Engineering and Water Pollution Control study programme should work more closely with the Ministries of Rural Affairs and of the Environment to improve its visibility in society and expand its practice area.
 - 8) Moodle could be used more extensively.
 - 9) Members of the teaching staff are not engaged in regular development of their teaching skills. Lecturers should be trained to use active learning methods. Teaching performances should be better evaluated and staff engagement in self-development should be considered as one of the promotion criteria.
 - 10) The process of teaching and learning does not support international mobility. The credit transfer system should be improved to avoid prolongation of studies.
 - 11) It is recommended that a strategic plan be developed for future recruitments, including from among PhD students.
 - 12) More guest lecturers from other Estonian or international HEIs, as well as practitioners, should be involved in the teaching.

General recommendations for the HEIs regarding the ARCHITECTURE study programmes

- 1) When designing the content of study programmes the HEIs should, within the limits of existing resources, take into account future challenges in society, in particular as regards demographic changes, environmental problems, technological revolution, globalisation of the economy, standards and industry, the development of civil society, etc. In the rapidly changing world it would be useful to seek a cross-disciplinary collaboration, especially between building and architecture specialties, but also with other universities.
- 2) The HEIs and study programmes should collaborate closely, differentiate their study programmes and explore ways to create further synergies.
- 3) It is recommended that the HEIs encourage and pursue new forms of cooperation with their stakeholders.
- 4) Remuneration of lecturers must be competitive, because low salaries are associated with the risk of losing leading lecturers and there is less chance to involve new talents, including from abroad.
- 5) The problems with transfers of credits acquired through external mobility should be addressed.

Landscape Architecture (MSc, taught in English and Estonian)

Strengths

- 1) The Landscape Architecture Department has been successful in acquiring international research grants and recruiting international students.
- 2) Both study programmes comply with international standards (ECLAS, IFLA) and are in line with international trends in the teaching of landscape architecture.
- 3) The study programmes prepare students well for actual challenges in the labour market in a broadening field of activity.
- 4) Students and staff participate in international mobility.
- 5) Within the framework of practical training, field trips are organised for students. The students come in contact with actual design and planning examples at various stages of their studies.
- 6) The teaching staff have a well-balanced age and gender structure. New generations of teaching staff are ensured, enough young researchers and lecturers are involved in the teaching process.
- 7) The staff members have strong scientific and/or professional practice backgrounds and international experience.
- 8) The students have their own professional association – Estonian Landscape Architecture Students' Association.
- 9) The students have ample opportunities for international mobility.

Areas for improvement and recommendations

- 1) The Committee recommends that the University contact Tallinn University of Technology about the study programme in landscape architecture that was recently launched there to discuss the profiles, contents and specifics of the study programmes at both universities as well as to explore ways for collaboration.
- 2) A realistic balance should be ensured between the teaching and research workloads of the teaching staff in order to reduce their stress caused by overloads. It is especially important to allow the lecturers who are studying in doctoral programmes sufficient time to complete their doctoral theses and provide them with the necessary support.
- 3) The number of small-size courses (2–3 ECTS credits) should be reduced in the study programmes in order to bring out the essence of the programme (engineering education/design education in studios) and the courses supporting it. Also, the names of several courses do not clearly reflect their content and should be changed.
- 4) In light of the complex societal challenges ahead, landscape architects should expand their collaboration with other departments of the University. Collaboration with new social partners in both public and private sectors should also be developed.
- 5) It should be thought through how the changes in didactics of landscape architecture education can influence future resource needs. The teaching and learning process should make better use of the Virtual Landscape Theatre.
- 6) A strategy for resource adaptation to the increasing student numbers should be developed.
- 7) It should be considered to make the currently voluntary practical training in landscape architecture (18 ECTS credits) compulsory for all students in the programme.
- 8) Having official agreements with foreign universities would further increase the international mobility of students and staff members.
- 9) The potentials offered by the EULand21 project should be used and a strategy developed for making more use of e-courses offered by partner universities and other institutions.
- 10) Measures should be taken to ensure that students complete their studies on time, and communications should be improved with students who are at risk of dropping out.
- 10.** Point 41 of the document, 'Quality Assessment of Study Programme Groups in the First and Second Cycles of Higher Education', establishes that the Quality Assessment Council shall approve an assessment report within three months after receipt of the report. The Council shall weigh the strengths, areas for improvement, and recommendations pointed out in the

assessment report, and then shall decide whether to conduct the next quality assessment of that study programme group in seven, five or three years.

11. The Council weighed the strengths, areas for improvement, and recommendations referred to in point 9 of this document and found that the study programmes, the teaching conducted under these programmes, and development activities regarding teaching and learning conform to the requirements if the University eliminates the following shortcoming:
- Subsection 6 (3) of the Government of the Republic Regulation, 'Standard of the Higher Education', prescribes that *the objectives and learning outcomes of a study programme shall meet the requirements and trends of international legal instruments that regulate the professional field*. The Civil Engineering (Rural Building) study programme is not entirely in accord with international minimum requirements for civil engineers – for example, the study programme does not give enough emphasis to geotechnical engineering or construction of infrastructure (bridges and tunnels). The institute should review the study programme and separately itemise the objectives and learning outcomes regarding the fields of civil engineering and rural building.
 - According to clause 6 (7) 3) of the 'Standard of Higher Education', *the conduct of studies conforms to the requirements if ordinary teaching staff have regularly furthered their pedagogical skills*. With regard to the Civil Engineering and the Hydraulic Engineering and Water Pollution Control study programmes, the teaching staff members are not engaged in regular development of their teaching skills. Lecturers should be trained to use active learning methods. It is recommended that a strategic plan be developed for future recruitments.
 - If the University wishes to encourage both outgoing and incoming international mobility, it will be essential to include more courses taught in English in the study programmes, involve more English-speaking international lecturers, improve language proficiency of the core staff and also prepare the University for internationalisation in a cultural and organisational sense.
12. According to clause 53 (1) 2) of the Administrative Procedure Act, *a secondary condition of an administrative act is an additional duty related to the principal regulation of the administrative act* and, according to clause 53 (1) 3), it is also *a supplementary condition for the creation of a right arising from the principal regulation of the administrative act*. Clauses 53 (2) 2) and 3) establish that *a secondary condition may be imposed on an administrative act if the administrative act cannot be issued without the secondary condition, or if issue of the administrative act must be resolved on the basis of an administrative right of discretion*. The Council found that, without a secondary condition, the next quality assessment of the study programme group should be conducted in less than seven years, and therefore, on the basis of points 41.1 and 42 of the document, 'Quality Assessment of Study Programme Groups in the First and Second Cycles of Higher Education', the Council

DECIDED

to approve the assessment report and to conduct the next quality assessment of the Architecture and Building study programme group in the first and second cycles of higher education at the Estonian University of Life Sciences in seven years with the following secondary condition:

No later than 12.06.2019, the Estonian University of Life Sciences shall submit a progress report in English to the Council on eliminating the shortcomings referred to in point 11 of this document. Members of the assessment committee shall be involved in the assessment of compliance with the secondary condition.

The decision was adopted by 10 votes in favour. Against 0.

13. In case the Estonian University of Life Sciences does not comply with the secondary condition by the due date, the Council will repeal this assessment decision and set a new date for a quality assessment of the study programme group, or establish a new secondary condition.
14. The Council proposes that the Estonian University of Life Sciences will submit an action plan to EKKA with regard to the other areas for improvement and recommendations pointed out in the report no later than 12.06.2019.
15. A person who finds that his or her rights are violated or his or her freedoms are restricted by this decision may file a challenge with the EKKA Quality Assessment Council within 30 days after the person filing the challenge became or should have become aware of the contested finding. A judicial challenge to the decision may be submitted within 30 days after its delivery, filing an action with the Tallinn courthouse of the Tallinn Administrative Court pursuant to the procedure provided for in the Code of Administrative Court Procedure.

Tõnu Meidla
Chair of the Council

Hillar Bauman
Secretary of the Council