



ESTONIAN QUALITY AGENCY  
FOR HIGHER AND VOCATIONAL EDUCATION

# Institutional Accreditation Report for Estonian University of Life Sciences

2019

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## Introduction

‘Institutional accreditation’ is the process of external evaluation which assesses the conformity of a University or higher education institution’s management, work procedures, study and research activities and environment to both legislation and the goals and development plan of the higher education institution itself. This is feedback-based evaluation in which an international assessment panel analyses the strengths and weaknesses of the institution of higher education based on the self-assessment report of the institution and on information obtained during the assessment visit, providing recommendations for improvement and ways of implementing them.

The goal of institutional accreditation is to support the development of strategic management and quality culture that values learning-centeredness, creativity and innovation in the higher education institutions (HEIs), as well as to increase the societal impact of education, research and development delivered by the HEIs.

HEIs are assessed according to twelve standards of institutional accreditation. Assessment focuses on the core processes of the HEI – learning and teaching, research, development and creative activities, and service to society – as well as on strategic management of the organisation and resource management. The learning and teaching process is examined in more detail under five standards (study programme, teaching staff, learning and teaching, student assessment, and learning support processes). Throughout the assessment process, there is a focus on academic ethics, quality culture and internationalisation.

Educational institution must undergo institutional accreditation at least once every seven years based on the regulation approved by EKKA Quality Assessment Council for Higher Education [Guide to Institutional Accreditation](#).

The institutional accreditation of *Eesti Maaülikool* (Estonian University of Life Sciences, EMÜ) took place in April 2019. Estonian Quality Agency for Higher and Vocational Education (EKKA) compiled an international assessment panel for the accreditation as follows:

<b>Tove Blytt Holmen (Chair)</b>	Senior Advisor, The Norwegian Agency for Quality Assurance in Education (NOKUT), Norway
<b>Laima Taparauskiene</b>	Vice-Rector for Studies, Vytautas Magnus University, Lithuania
<b>Rik Leemans</b>	Professor, Head of Environmental Systems Analyses Group, Wageningen University and Research, The Netherlands
<b>Francisco Aguilar</b>	Professor & Deputy Research Director, Centre for Environmental and Research Economics, Swedish University of Agricultural Sciences, Sweden
<b>Alvija Šalaševičienė</b>	Director of Food Institute, Kaunas University of Technology, Lithuania
<b>Kathryn Moore</b>	Professor of Landscape Architecture, Birmingham City University, United Kingdom
<b>Liv Teresa Muth</b>	Member of the European Student Union (ESU) Quality Assurance Student Experts’ Pool, Germany

The assessment process was coordinated by EKKA staff - Ms Jekaterina Masenko and Ms Tiia Bach.

After an initial preparation phase where the distribution of tasks between the members of the assessment panel was determined, the work of the assessment panel in Estonia started on Sunday, 14 April 2019, with an introduction to the Higher Education System as well as the assessment procedures by EKKA. Members of the team agreed the overall questions and areas to discuss with each group during the site visit and to a detailed schedule for the site visit.

During the following three days, from, Monday 15th to Wednesday 17th April 2019, meetings were held with EMÜ representatives as well as external stakeholders.

On Thursday, 18 April 2019, the panel held an all-day meeting, during which both the structure of the final report was agreed. Findings of team meetings were compiled in a first draft of the assessment report and evaluation of the 12 accreditation standards.

The Institutional Accreditation Report for the EMÜ consists of two parts: (1) a report on institutional accreditation and (2) a report on quality assessment of three study programmes: Forestry BSc; Landscape Architecture MSc; and Production and Marketing of Agricultural Products MSc. The findings of the study programme assessments are used to inform the full institutional accreditation report, through a form of 'sampling'.

### Information about the Estonian University of Life Sciences (EMÜ)

EMÜ is one of the six public universities in Estonia. The university is registered as a public legal person in the state register of state and local government agencies, 26.02.2003, acting according to the Constitution of the Republic of Estonia, the Universities Act, the Statutes and other legislative acts.

EMÜ is the only university in Estonia whose priorities in academic and research activities provide the sustainable development of natural resources necessary for the existence of Man as well as the preservation of heritage and habitat. Research forms a basis for teaching at all levels of higher education.

**Mission:** The University creates and shares knowledge to the promoters of bioeconomy for the best of Nature and Humanity.

**Vision:** The University is an internationally recognized research university in the field of bioeconomy.

**Core values:** reliability, academic freedom, openness, creativity, Estonian language and culture.

Since 2005, EMÜ academic structure is comprised of **five institutes**:

1. Institute of Agricultural and Environmental Sciences
2. Institute of Veterinary Medicine and Animal Sciences
3. Institute of Forestry and Rural Engineering
4. Institute of Technology
5. Institute of Economics and Social Sciences.

An institute is a structural unit, acting as a research and development institution aimed at fostering science and academic practice, also providing the necessary study, research and development services to the society.

There is one college, Tartu Technical College, and two centres: Language Centre and Centre for Science Studies Karl Ernst von Baer House (studies of research history). The three interdisciplinary units in EMÜ are: Centre of Bioeconomy, Centre of Renewable Energy, and Nature collections. These interdisciplinary units bring together research and development activities and/or academic activities of several structural units under a common umbrella.

### Main changes on the basis of recommendations of the last institutional accreditation

The previous accreditation of EMÜ took place in 2012 and it received an accreditation for 7 years. The previous panel made some recommendations to EMÜ, which this panel feels EMÜ has reacted well to and taken into account.

EMÜ was recommended to improve their marketing and media communication to become pro-active. It was also suggested to collect feedback from public-oriented activities and improve EMÜ's English internet pages. EMÜ has based its marketing activities on a marketing strategy and has become more active on social media to get a direct contact with younger people. EMÜ takes part in more than 40 educational events and fairs in Estonia and the experience is analysed and its effect on potential students assessed. In 2016, EMÜ launched a new homepage, where a lot of effort was put into the representation of English degree and exchange programmes.

It was also suggested to increase use of English across all EMÜ programmes. EMÜ introduced two study programmes (curricula) fully taught in English in the academic year 2013/2014: Veterinary Medicine and Landscape Architecture (MSc level). In both cases, there is a parallel programme in Estonian, and international and Estonian students are jointly taught in a number of courses. According to EMÜ, it is the only university in Estonia providing compulsory, subject-related English courses in all first and second cycle curricula. EMÜ Language Centre offers six English language courses students can benefit from. EMÜ also offers possibilities for academic and administrative staff to improve their English.

Effectiveness of feedback systems was another area for improvement. Solving the problems related to asking for feedback on teaching and learning is a very complicated task, EMÜ is continuously working on its development and making it more constructive. In the autumn of 2019, it is planned to switch to a new study information system, and the feedback system along with the questionnaire will thereby also be reviewed.

Library staff needed to improve their guidance on literature searches. Now the library conducts training courses on the use of library and online resources. Twice a year the library conducts an e-learning course "Introductory course: information search and use of databases" (3 ECTS). Information on how to access databases is available on the library web page.

To improve its management system, EMÜ has merged two R&D strategies into one document – "R&D Strategy until 2025. Knowledge-Based Bioeconomy" – and every year an action plan is drawn up. In 2013, EMÜ ordered an analysis from the Central and Eastern European consultancy firm Civitta to assess the effectiveness of administrative and support structures' activities as well as their response

to EMÜ's needs. As a result of this research, support services were mapped, the effectiveness was assessed using comparison tools, and suggestions for improvements were made.

An improvement in the overall standard of research supervision was needed as well as constant oversight to detect plagiarism. EMÜ collects feedback from the annual evaluation of PhD students and satisfaction surveys carried out among PhD students. Still, based on PhD students' feedback, there is room for improvement and complaints mostly concern lack of communication skills and time devoted to direct contacts with students (SAR – p. 16). Regarding plagiarism, the programme KRATT is available for students to check their work and the programme URKUND is used by the teaching staff. However, as seen in the analysis below, the panel feels that a wider integration of ethical dimension (including honesty, fairness, compassion, confidentiality, conflict of interest, responsibilities) into all studies area should be strengthened.

Finally, a recommendation was made to increase collaboration between EMÜ and other universities. In 2013 the collaboration contract between EMÜ and the University of Tartu (TÜ) was signed in order to share responsibility and resources in the field of teaching environmental sciences. According to the agreement, EMÜ involves teachers and researchers from TÜ in the areas of environmental law, environmental technology and geology. TÜ involves teachers and researchers from EMÜ in the areas of waste management, hydrotechnics and environmental management.

### Impressions of the institution, self-assessment report and of the site visit

The assessment panel promptly developed an appreciation of EMÜ as an institution uniquely placed to offer quality academic programmes in applied sciences. EMÜ has strived in recent years to become more international by encouraging the enrolment of foreign under- and graduate-students in existing and newly developed academic programmes and greater participation of teaching staff in mobility programmes. EMÜ's Self-Assessment Report (hereinafter SAR) 2018 offered a rich overview of the institution and information on all 12 EKKA accreditation criteria. However, panellists have the impression that the report was largely assembled by the central administration with input from individual academic units. It resulted in a degree of inconsistency in reporting of individual standards, which is particularly obvious when reading specific information by selected academic programmes. The panel also deemed EMÜ's SAR could have proactively addressed major issues including:

- What is the specific impact that the most recent Higher Education Act will have in the structure and management of EMÜ. The University Act was mentioned in the SAR but an opportunity was missed in terms of how its implementation can position EMÜ to better meet all accreditation standards.
- How University Council Regulation on the *2025 Knowledge-Based Bioeconomy* is shaping research, teaching, creative activities and society outreach, among other institutional actions. For instance, the University Council Regulation outlines a common research chain, priorities, and stresses the University's responsibilities with society, among others. The SAR only briefly mentioned how its implementation can support the attainment of interdisciplinary programmes but failed to describe how it is reshaping them and as a conduit to excel in all standard criteria.
- How EMÜ is comprehensively and proactively coping with high student drop-out rates. The panel identified high drop-out rates as a major and pervasive issue in the SAR but there was not much information regarding strategic actions taken to address them. For instance, the SAR (p. 62) notes that "The purpose of counselling is to support students in their studies and to reduce dropout rates" but no additional information on how counselling fits within a larger strategy to deal with

high drop-out rates was provided. The panel would have appreciated a greater level of analysis and insights provided to such a significant issue.

- Institutional feedback practices do not always respond to issues identified in student and/or staff evaluations. For instance, the report notes that in “2017, 76.6% of employees were satisfied with management, which is slightly less than in 2011, the 83.6%, but the difference is not statistically significant” (SAR – p. 34). Such assessment seemed dismissive of a potentially problematic trend and missed the opportunity to point to qualitative efforts designed to respond to it.
- EMÜ offers much value to society but section ‘3.12 Service to Society’ was not well articulated. A number of activities were listed under this section without much integration and a narrative that would highlight the value of community outreach actions, thus, making it difficult for the panel to appreciate this critical institutional role. For instance, the role of the Open University within the larger mission to serve society was not well structured and an opportunity was missed to inform the assessment panel on such a major initiative. Other activities such as ‘virtual tour’, ‘public space’, ‘feedback assessment’ did not directly address issues under this particular criterion.

Interviews during the site visit were open and candid during individual and collective evaluations. Interviewees helped the panellists develop a deeper appreciation of EMÜ as an institution of higher learning in Estonia. Some noteworthy points identified by the panel included: a culture of openness and free exchange of ideas, outstanding hands-on applied academic programmes, and solid relationships between institutional and external stakeholders. The panel learned about qualitative assessments and actions taken to deal with student and staff feedback drop-outs that presented a more complete picture than the SAR. The value of services offered by EMÜ to society became abundantly clear during the site visit, too. Given the nature of academic programmes at EMÜ it is recommended that future panels should also visit centres (e.g. farms) where outreach, research and teaching also takes place to gain a greater appreciation for the resources, management, and culture throughout the entire institution.

## Summary of the institutional accreditation findings

### General Findings:

EMÜ is the only university offering degree programmes and research activities at all three levels of higher education in the field of life sciences in Estonia. EMÜ has clearly defined vision and missions with a current focus on the bioeconomy under University Council Regulation '2025 Knowledge-based Bioeconomy'. EMÜ has approved a Development Plan (DP) 2016-2025 with Action Plans drawn annually which are, along the University budget, submitted to the University Council for approval. National priorities are well integrated into all university activities.

EMÜ has a well-defined staff development system where institute directors and chairs engage in the management of resources to support staff development. Excellent performance is recognized through awards such as the EMÜ Teacher of the Year, Instructor's Award for Continuing Education, Innovative University Teacher Award, e-instructor of the Year award, among others. EMÜ's financial resources are clearly allocated on basis of the DP. Public information about EMÜ's activities, including study programmes, is correct, up-to-date, easily accessible and understandable.

Quality assurance of research support, student feedback and evaluation does not seem to be consistently implemented across EMÜ with differing practices between institutes. There were only a few indicators of uniform quality culture regarding educational quality. There seemed to be limited communication on top-down administrative expectations and bottom-up reporting concerning quality in education based on site interviews. Regarding other indicators of quality EMÜ did not present nor discussed in detail in the SAR or during on-site interviews specific levels of quality culture achievement. The panel recognizes that EMÜ is undergoing major structural changes with the implementation of the new Estonian Higher Education Law that can improve quality assurance measures in the future. The panel encourages EMÜ to regularly produce comprehensive institution-wide quality-evaluation analyses in English and Estonian for future examination by other review panels to help attain full compliance with this criterion.

EMÜ follows principles of equal treatment and academic ethics outlined in the Magna Carta of European Universities and the Code of Ethics of the Estonian scientists framed by the Estonian Academy of Science and the Law of Authorship Integrity. EMÜ has established clear rules for principles of academic ethics in research and when a case arises the institution tries to find customized solutions. EMÜ maintains an open-door policy as part of an informal complaint system, however, the university has to ensure that any informal complaint process is interlinked with a formal complaint system to detect, monitor and solve systematic deficiencies.

EMÜ has set ambitious goals for internationalisation evaluated based on the number of teaching staff mobility exchanges, student mobility, number of English-taught study programmes and courses, and full-time international degree-seeking students. EMÜ actively supports internationalisation as evidenced by the establishment of the International Office within the Department of Academic Affairs, the EMÜ Development Fund, among other programmes and activities. The EMÜ community is working toward improving student integration. Better integration of Estonian and international students will contribute to the cultural openness of Estonian society and avoid potentially differentiated tiers in access to institutional resources and services.

Teaching at EMÜ is conducted by a sufficient number of professionally competent teaching staff. Teaching staff value and are offered adequate opportunities for self-development. EMÜ has developed university-wide programmes to develop and share teaching competencies. EMÜ teaching



staff closely collaborate in the fields of teaching, research and/or creative works also engaging academic peers in other higher education institutes and stakeholders, including alumni, ministries and private-sector entrepreneurs.

EMÜ is the only HEI in Estonia offering science-based higher education in the fields of agriculture and forestry, animal science, veterinary medicine and food science. The development and opening of curricula ensure that the study outcomes of bachelor's and professional higher education programmes are in accordance with the qualification framework level 6, and Master's study programmes with the general requirements of level 7. Adoption of an institutional 'open door' policy facilitates sharing of expectations from students, faculty, staff and external stakeholders regarding study programmes. This is extended to the flexibility in revising academic programmes to implement relevant workforce trends and demands. Creativity and entrepreneurship is encouraged in the various curricula in the ambition to encourage graduates to start their own companies.

EMÜ has stated admission conditions and procedures to select students accessible online. Admission requirements are approved by the University Council and updated annually. Teaching content, methods, assessment criteria and methods support students in achieving their learning outcomes and developing key competencies. Teaching content seems interdisciplinary and closely related to research conducted at the institutes. However, the panel was not provided with explicit examples where a student-centred approach to teaching and learning was employed. Alumni are largely satisfied with the knowledge and practical skills acquired from their study programmes.

The assessment of students, including student's previous studies and work experience, is based on regulations of the Ministry of Education and Research, and Regulation of Studies confirmed by EMÜ University Council. Course syllabi include assessment methods and criteria and are made available on EMÜ study information system (ÕIS) before the start of the new academic year. EMÜ supports the development of faculty members' assessment competencies. It has also developed principles for assessing internships, including participation by the supervisor from the hosting institution to provide feedback during the internship.

Academic counselling includes introductory courses on the organisation of the University, the curriculum structure, and practical experiences at BSc and MSc programmes to help students understand the various learning-support measures available at EMÜ. High drop-out rates are a matter of concern and interviewed students pointed out that early drop-outs often result from their erroneous expectations and misunderstanding of learning outcomes and the content of academic programmes, and late dropouts are often due to financial and personal reasons. EMÜ should systematically and proactively try to address student dropouts by clearly identifying and analysing root-causes in order to devise proper preventative measures. In case of mental health problems, a psychologist is available to advise students. However, currently there is no competent English-speaking personnel able to counsel international students.

Roles and responsibilities in research, development and/or other creative activity for society are valued at EMÜ. RDC activities are regularly evaluated. Research generally informs teaching with lecturers commonly using the latest research results in their classes. The university and its institutes are well aware that good strategic plans are needed to keep student numbers to acceptable levels as indicated in the performance agreement with the Ministry of Education.

Society's needs for constantly developing their knowledge is taken well care of through lifelong learning, courses that are set up and administrated by the Open University (AÜ). EMÜ disseminates know-how to relevant stakeholder groups EMÜ employees are encouraged to participate in the work

of professional associations, community councils and decision-making bodies. EMÜ is proud of their graduates and how they contribute to the betterment of Estonian society.

A summary of the assessment outcomes are given in the table below.

	conforms to requirements	partially conforms to requirements	does not conform to requirements	worthy of recognition
Strategic management	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Resources	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Quality culture	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Academic ethics	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Internationalisation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Teaching staff	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Study programme	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Learning and teaching	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Student assessment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Learning support systems	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Research, development and/or other creative activity	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Service to society	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

#### Commendations:

- *EMÜ has an ambitious mission, a clear vision, and well-designed Development Plan with key performance indicators and implementation activities.*
- *Administrative, financial and legal support staff are very competent and easy to approach. EMÜ's financial resources are clearly allocated on basis of its DP.*
- *EMÜ maintains an "open door policy" as a form of quality culture throughout the institution.*
- *Main values and principles of research integrity are implemented with responsible individuals identified at individual institutes.*
- *EMÜ has an increasing number of staff and student mobility exchanges and actively supports greater internationalisation through the allocation of financial resources and development of relevant programmes and activities.*
- *Teaching at EMÜ is conducted by a sufficient number of professionally competent teaching staff who value and are offered adequate opportunities for self-development.*

- *Creativity and entrepreneurship are encouraged in the various study programmes to motivate graduates to start their own companies.*
- *Teaching content is interdisciplinary and closely relates to research conducted at individual institutes.*
- *Roles and responsibilities in research, development, and/or other creative activity for society are highly valued at EMÜ.*
- *Members of EMÜ actively contribute to the betterment of Estonian society.*

**Recommendations:**

- *EMÜ did not clearly present in the SAR nor discussed in detail during the on-site visit specific levels of evaluation of quality culture. The panel strongly encourages EMÜ to regularly produce quality evaluation analyses also available in English.*
- *EMÜ informal complaint system in cases of ethic violations should be systematically documented and interlinked with a formal complaint system to help detect, monitor and solve systematic deficiencies.*
- *EMÜ should proactively identify and analyse root-causes of high drop-out rates in order to devise proper preventative measures.*
- *EMÜ must have student counselling resources available in English in order to offer equally accessible services to national and international students.*
- *EMÜ should be able to promptly and clearly offer examples where a student-centred approach is employed in teaching and learning.*
- *EMÜ should review recruitment strategies in an attempt to widen the recruitment but also to stimulate existing students to fulfil their studies.*
- *The current EMÜ focus on the bioeconomy theme could be reconsidered within other concepts such as the circular or green economy and relevant United Nation's sustainable development goals to create a broader base for collaboration within and outside the university and easy communications with Estonian society.*

## 1.1. Strategic management

### Standard:

Development planning at the higher education institution is purposeful and systematic, involving various stakeholders. The higher education institution regularly evaluates the achievement of its stated objectives and the impact of its activities.

### Guidelines:

*The HEI has formulated the objectives and key results for its core activities – learning and teaching; research, development and creative activities, and service to society – taking into account national priorities and the needs of society, focusing on its strengths and reducing unnecessary duplication both within the HEI and throughout higher education in Estonia. The HEI is managed in accordance with its mission, vision and core values, as well as objectives set out on the basis of those principles. Achievement of the objectives and effects of the activities are evaluated regularly. Creativity and innovation are supported and given value in both core and support activities. Membership of the HEI (including students), as well as external stakeholders, is involved in developing and implementing the HEI's development plan and action plans. The HEI members share the core values that serve as a basis for the institution's development plan.*

### Indicator:

*The rate of achieving the objectives set in the development/action plan (key results)*

conforms to requirements	partially conforms to requirements	does not conform to requirements	worthy of recognition
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Evidence and Analysis

EMÜ has a long history in the fields of agriculture, forestry, sustainable use of natural resources, rural life and rural economy. Therefore, EMÜ has a clearly defined vision and mission with focus on bioeconomy and internationally recognised research. The top management of the university is very focused on making bioeconomy as an institutional priority for all related activities. However, the assessment panel after reviewing the SAR and on-site interviews found that bioeconomy as such was an ambiguous concept that needs a congruent institutional approach (involving all institutes) to understand its potential both for the university and Estonia. Bioeconomy as the main focus was reported by all levels, but a wider understanding of what it is and their role in it was missing. The top management reported it as challenging, thus, efforts are ongoing to motivate collaboration in different ways in all institutes, initiating discussions with heads of institutes and chairs about how they could better cooperate in the field of bioeconomy in teaching and research. Other initiatives include raising awareness about and visibility of the bioeconomy through seminars (at least twice per year with 70-80 persons), and organising scientific conferences and forums. A fund for promoting cooperation in bioeconomy has been established.

The core values of EMÜ are reliability, academic freedom, openness, creativity, Estonian language and culture. As an example of creativity, EMÜ is supporting best ideas, e.g., there is a yearly competition for best innovative idea “*Emerging Sprout*”, best teacher, etc. EMÜ applies “open-door” policy to

communicate in a respectful surrounding and everyone has the possibility to give comments and advice for improvements.

EMÜ has approved its [Development Plan \(DP\) 2016-2025](#), which is accessible on the university's website, so everyone can know the main strategical goals. DP covers core activities: Research and development, teaching and studies, members of the EMÜ community, society and organization. Purposefulness of set objectives and goals are related to the main target-mission and reflects the aspiration to become international research university (main attention on cooperation, involving international staff, highly cited publications, PhD studies), research service to the society (cooperation with enterprises, increase of revenue, share of knowledge). The DP serves as basis (as action plan) for the development plans of the academic and other units of EMÜ and is coordinated by Vice-Rector for research. A well-defined DP seems very realistic, with stated main strategical areas, goals and the main objectives till the year 2025. The scope of the Plan reflects the intention to become an internationally recognized university with internationally competitive research and development activities, and at the same time ensuring the basis for excellent teaching at all levels of higher education. Seminars involving stakeholders for developing the DP was arranged twice, the main topics were collected, then approved by a standing committee. A web-based portal was created to facilitate contributions from all members of the University to this process. During the visit top management and directors explained their involvement in the development of DP. However, students, external stakeholders, some leaders of programmes and members of supporting structures mentioned during site interviews that they were informed about the development of the DP but did not take an active role in the process. Therefore, balance between top-down and bottom-up approaches within coherent groups during development of strategical plan could help effectively involve (participate, generate, comment) the whole community of EMÜ and link their role as well impact on strategical goals and achievements. The assessment panel found the DP to be very ambitious as this could be a significant opportunity for EMÜ to show how it is transforming the institution to address EMÜ 2030 Sustainable Development Goals, to achieve a significant contribution to developing an appropriate bioeconomy. The panel suggests a wider inclusion of the whole EMÜ community (students, researchers, teaching staff, supporting staff, Alumni, stakeholders, etc.) and continuous discussions are needed to become bioeconomy advocates.

For every year EMÜ has an action plan (AP) which meets the objectives of strategic sectors planned in DP. The basis for preparing the AP is the proposals of structural units for fulfilment of the sub-objectives of strategic sectors from required activities. The AP is discussed at rector's board, institutes, academic units and approved by the University Council. Implementation of the AP is approved together with the annual report by the University Council. During the site visit the assessment panel was presented an Action Plan for 2017 with clearly stated objectives, needed finances, and the responsible unit as well short comments if it is done, partly done, undone. Additionally, development seminars-discussions (1 to 2 times per year) are organised on focus areas as an opportunity to discuss shortcomings and developmental goals and identify EMÜ's progress with regard to the Development Plan. During the visit, the panel was notified by several groups that the achievements are discussed after every semester or yearly depending on the topic, all staff are aware of the standards that are set in the DP. Key performing indicators (KPI) of DP are defined and cover qualitative and quantitative values. KPI have strong international orientation, which is commendable and strongly recommended to go forward with. However, more quantifiable indicators should be developed for the action plan and include success ratio how every unit could see their impact on the development of the whole university and could identify success ratio in measurable indicators. The DP has a long list of sub-strategies (R&D Strategy until 2025, Knowledge-Based Bioeconomy, Academic Quality Strategy, Territorial-spatial Development Plan, Green University Strategy until 2025,

Marketing Strategy). All sub-strategies are reflecting (linked to) DP, but the panel found it somewhat confusing that the main strategy has some additional strategies, therefore it would be appreciated to have one comprehensive document for 3-5 years' period and it should be updated involving the whole community of the university. The number of strengths and weaknesses in the DP is surprising (there is only one strength and one weakness mentioned). On the one hand, it seems that the university is pretty satisfied with inner processes and did what they could; on the other hand, shortcomings and threats have been reported several times and these should be given much more consideration. While research activities at EMÜ are pretty well developed and monitored, studies seem as the second priority in terms of updating the process and meeting nowadays challenges. Keeping in mind how much attention has been paid on challenges related to admission of students, high dropouts, changing legislations and law which is coming into the force (according to EMÜ self-evaluation report as well as mentioned during the visit), Development Plan should be updated highlighting focus on teaching and studies, needs of students as well as attention on the quality assurance of studies.

National priorities are well integrated into all activities of the university since EMÜ is the only university providing studies and research activities at all three levels of higher education in the field of life sciences (agriculture, forestry, veterinary, etc.). The needs of society are met also by organising special events (seminars, conferences) and by networking with alumni, and they are appreciated by society and stakeholders (as was reported to the panel during the visit). During the visit the panel was told that the university and the society of the related field in Estonia have a common understanding, a common feeling, but they are still on the crossline having discussions where Estonia has to be. For instance, the university is strong in environmental issues, but discussions on how to produce lower carbon footprints is still missing. The impact of the society on the culture of the institution and/or its study programmes have room for improvement. There is little evidence of the concept of bioeconomy being interpreted in a creative way to integrate and transform the culture of the institution, especially at the study programme level.

### Commendations

- Ambitious mission, clear vision, well-designed Development Plan with stated objectives and key performance indicators. Action plan for fulfilment of the sub-objectives of strategic sectors from required activities are prepared and updated on regular basis;
- Management and planning activities of EMÜ are based on approved strategies, described processes, decision steps. Implementation of developing plan is evaluated and achievements are discussed systematically.

### Recommendations

- Wider inclusion of the whole EMÜ community (students, researchers, teaching staff, supporting staff, Alumni, stakeholders, etc.) and continuous discussions are needed to become bioeconomy missionaries;
- Well-defined and quantifiable values for the action plan of strategic sectors of the DP should help identify success ratio and impact on it by all units' activities and react properly, as well adequately correspond for improvements;

- Development plan should be updated according to nowadays challenges: impact of changing legislation and law in Estonia, highlighting focus on teaching and studies (admission, dropouts, quality assurance). Top-down and bottom-up approaches within coherent groups could be beneficial.

## 1.2. Resources

### Standard:

The higher education institution develops its staff and manages its physical and financial resources in a purposeful, systematic and sustainable manner. Internal and external communications of the higher education institution (including marketing and image-building) are targeted and managed.

### Guidelines:

*The HEI has an efficient staff development system. The principles and procedures for employee recruitment and development are based on the objectives of the HEI's development plan, and are fair and transparent. The career model of academic staff motivates talented young people to start their academic careers, creates opportunities for progress, and ensures sustainability of the academic staff. The principles for employees' remuneration and motivation are defined, available to all employees, and observed.*

*Allocation of the HEI's financial resources is based on the objectives of its development plan. The management and development of its infrastructure (buildings, laboratories, classrooms, IT systems, etc.) are economically feasible. Sufficient resources are available for updating the infrastructure for education and research, and/or a strategy exists enabling the HEI to acquire them.*

*A sufficient amount of textbooks and other learning aids are available, they are of uniformly high quality and accessible. Publicly offered information about HEI's activities (including study programmes) and the findings of external evaluations is correct, up to date, easily accessible and understandable. The HEI has a system to popularise its core activities and academic career opportunities. The HEI has a functioning system for internal and external communications, relevant to the target audiences. The HEI members are informed of the decisions relevant to them in a timely manner.*

*Employee satisfaction with management, working conditions, information flow, etc., at the HEI is surveyed regularly and the survey results are used in quality improvement activities.*

### Indicators:

- *Distribution of revenues and costs (incl. RDC activities)*
- *The results of the staff satisfaction survey*

conforms to requirements	partially conforms to requirements	does not conform to requirements	worthy of recognition
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## Evidence and Analysis

EMÜ as a well-defined staff development system. The institute directors and chairs are responsible that the teaching staff continuously improves and develops further. Courses to do so are available. One of the goals here is that all lectures should hold a Ph.D. degree by 2020 to improve the link between research and teaching. Information from the student's study information system is used to identify poor and excellent performance of lecturers. Poor performance is mitigated and excellent performance is awarded (e.g. the Teacher-of-the-Year Award). Evidence showed that failing to (improve to) teach in English has already led to a few employment terminations.

The selection of professor positions is centralized. Institutes only provide advice. The institutes appoint all other personnel and follow the same rules and procedures. For example, the professors evaluate and rank the candidates, while the personnel department controls and facilitates the procedures. All academic positions are announced internationally. Hiring national or international staff follow the same fair and transparent procedures.

The career model of academic staff is motivating and creates opportunities for progress for junior teaching staff. All staff is stimulated to acquire external research funding from national, EU and other sources. Tender support specialists are available in the institutes and central in the university to guide (complex) acquisition processes as current (Estonian) tender procedures are strict.

EMÜ's financial resources are clearly allocated on basis of the development plan. The management and development of its infrastructure (buildings, laboratories, classrooms, IT systems, etc.) are economically feasible. However, much valuable research equipment is purchased on EU regional funds and research projects and maintenance contracts are deficient. This could jeopardize the future application of such equipment.

The library resources are sufficient, partly through its directly assessable collection of textbooks, periodicals and international scientific journals, but, more importantly, through the vast online availability of scientific journals (over 30,000 scientific journals<sup>1</sup>) and search engines. The other learning aids are generally of high quality and accessible. The library also takes a lead to investigate and offer possibilities for data storage and access and open access publications (as required by EU H2020 research projects). Estonia, however, has not yet agreed to the recently launched Plan-S for open-access science publishing.

Publicly offered information about EMÜ's activities (including study programmes) is correct, up-to-date, easily accessible and understandable. EMÜ has a system to popularise its core activities (as exemplified by the monthly Pereülikool or University for Families, and frequent visits of school classes).

Employees are very satisfied (as evidenced by the interviews) with administrative, financial and legal support. Connections to the support specialists are short and direct. Most managers (including the Rector and Vice-Rectors, directors and chairs) have an 'open door' policy. Staff and students appreciated that they can discuss issues with them. This often leads to prompt solutions. However, not all issues and the consequent decisions become formally documented, which could lead to an *ad-hoc* management culture. Most management processes are regularly surveyed; however, the survey results should be better used in quality improvement activities. EMÜ's staff and students are generally informed in a timely manner of the management decisions that are relevant to them. The

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<sup>1</sup> This indispensable asset was not mentioned in the self-evaluation report and only surfaced in the interview with the librarian.



current management structures and procedures also facilitate the transition to updated revised University structure under the new Estonian Higher Education Law.

### Commendations

- Administrative, financial and legal support staff are very competent and easy to approach.
- Procedures are well defined in the development plan and they are monitored and used to improve them.
- The staff members are committed, skilled and enthusiastic.

### Recommendation

- Although a centralized Depreciation Fund can cover the maintenance costs of appliances and high-level equipment, the lack of specific maintenance contracts for project-financed equipment is a risk for the continuity of world-class research. This should be better addressed.

## 1.3. Quality Culture

### Standard:

The higher education institution has defined the quality of its core and support processes, and the principles of quality assurance. In the higher education institution, internal evaluation supports strategic management and is conducted regularly at different levels (institution, unit, study programme), the findings of internal and external evaluations are analysed and quality improvement activities implemented.

### Guidelines:

*Members of the HEI have agreed upon definitions for the quality of their core and support processes and are guided by them in their daily work. The HEI develops and publicises its policies and procedures for internal quality assurance (internal evaluation) and conducts regular internal evaluations, which take into account, inter alia, the standards set out in this Guide, and incorporates feedback from its members and/or from external experts. In the course of internal evaluations, peer learning, comparisons with other HEIs regarding their results and means for achievement, as well as a sharing of best practices take place, among other things.*

*Internal evaluation is based on the following key questions in quality management: What do you want to achieve, and why? How do you want to do it? How do you know that the activities are effective and will have the desired impact? How do you manage the quality improvement activities?*

*Regular reviews and enhancements of study programmes ensure their relevance, including their compliance with international trends.*

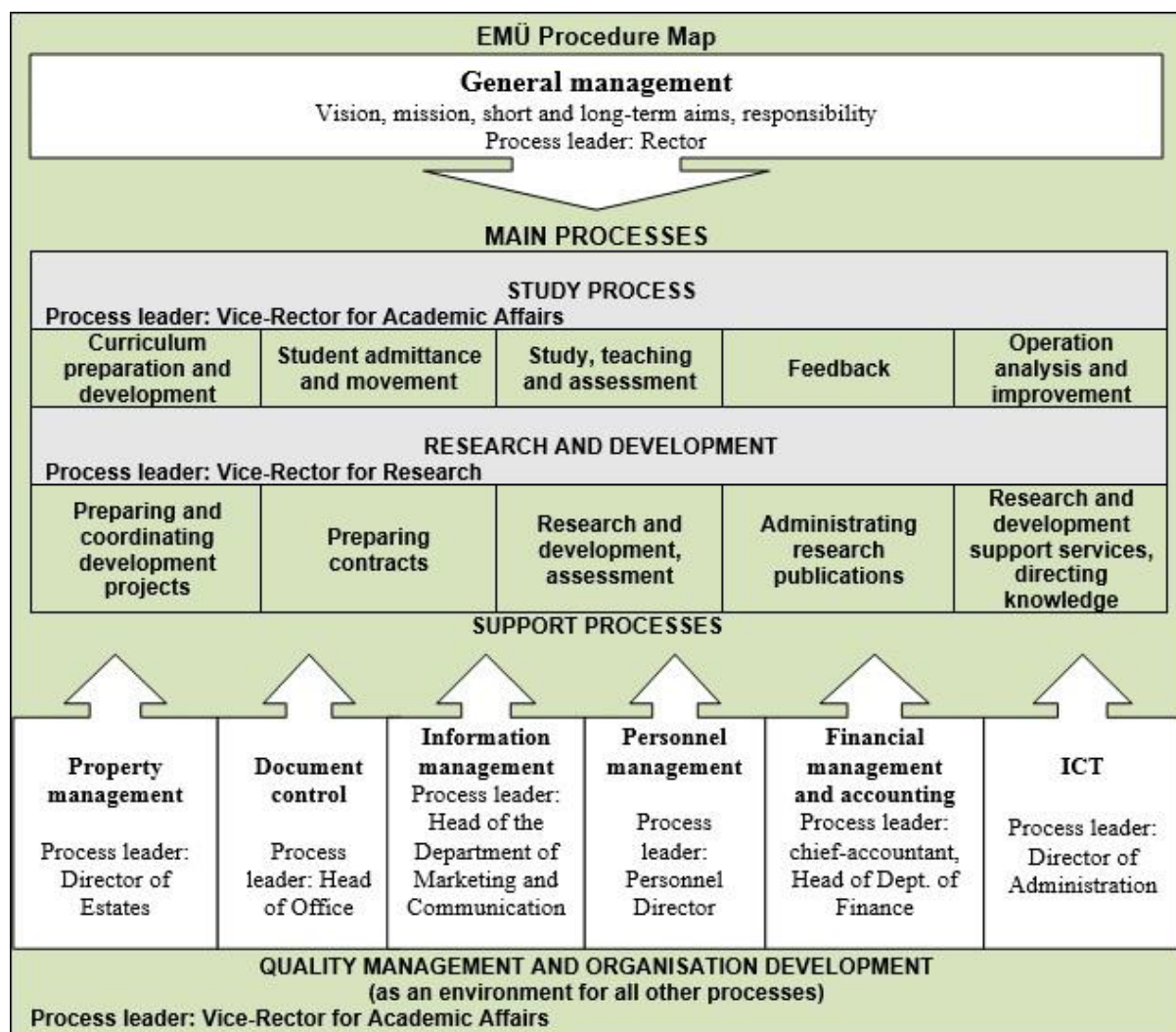
conforms to requirements	partially conforms to requirements	does not conform to requirements	worthy of recognition
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### Evidence and Analysis

As the panel understands this standard, it is quite encompassing. In order to fully understand what the standard 3 actually is asking for, all the elements could be listed as follows:

1. Quality culture occurs when EMÜ has defined the quality of its core and support processes
2. Quality culture occurs when EMÜ has defined the principles of quality assurance
3. Quality culture occurs when EMÜ performs internal evaluation that supports strategic management
4. Quality culture occurs when EMÜ conducts internal evaluation regularly at different levels (institution, unit, study programme)
5. Quality culture occurs when EMÜ analyses the findings of internal and external evaluations
6. Quality culture occurs when EMÜ has implemented quality improvement activities

EMÜ's core and support processes themselves are described through Figure 3.3.1 (SAR – p. 36).



Vice-rectors for academic affairs and research lead quality processes for their respective areas. We have noted the flow sheet on opening curriculum and developing curriculum. When the panel asked, it got the impression that other processes like quality assurance of research, support processes, student practice and of student feedback could differ between institutes and between the parties involved there and then.

EMÜ 's principles of quality assurance are described in Academic Quality Strategy of Estonian University of Life Science (adopted 01.12.2005):

- *To organise studies effectively and efficiently on an internationally acknowledged level;*
- *To meet and exceed the needs and expectations of the parties of the teaching and academic activities by the university;*
- *To guarantee the following of quality measures specified in EMÜ Quality Agreement.*

We found only few indicators regarding expectations for a uniform quality culture on education at EMÜ, and little communication on expectations top-down or information/reporting bottom-up concerning quality in education, especially at the Bachelor and Master levels.

Figure 3.3.2 in the SAR shows that EMÜ has a formal procedure for opening of curricula. EMÜ could have benefitted from having more obligatory processes to follow quality indicators like internationalisation, drop-outs, student work-load, among others; and how results are analysed and followed by supporting and/or developing activities. Directors of institutes could be more closely collaborate with Chairs in quality assurance of specific study programmes. The panel got the impression that the Chairs are solely responsible for study programmes while Institute directors take full responsibility of human resources. As Chairs were introduced relatively recently, it is recommended to proceed creating linkages between different governing structures and making quality culture as common “fit for purpose” goal.

We register that the Academic Quality Strategy was decided upon in 2005. The perspective on quality of higher education has changed considerably since. We could mention the institutional challenges that EMÜ faces in attracting students and introduction of national qualification framework and learning-outcome descriptors for BSc and MSc degree. Furthermore, the development of the European Area for Higher Education (EHEA) has introduced European standards for quality assurance (ESG Part 1). Last, but not least, the Estonian law for higher education might also introduce needs for adjustments/changes in quality assurance of higher education. All this leads the panel to strongly recommend EMÜ to revise their Academic Quality Strategy accordingly.

Target levels for teaching and studies are listed in the DP. EMÜ relies heavily on student feedback. Students and graduates are asked to give feedback (in questionnaires) to lecturers and subjects, curriculum manager or PhD supervisor concerning curriculum content, teaching, supervision and service quality. Results of students' feedback on teaching is one of the strategic indicators used for monitoring fulfilment of the objectives of the strategy and development directions (oral testimony by DAA staff). It was evident that the feedback is constantly evaluated and discussed within the academic staff, curriculum committee and the administration and the improvements are introduced if needed. During the interviews, the panel got the impression that, in the student feedback, a score 2.8 or lower out of 5 was frequently used by Chairs, Director of institutes, Department of academic affairs (DAA) and others as an indicator of deficient instruction regarding teaching quality.

As an example of internal evaluation that supports strategic management, EMÜ provided us with an overview on mapping of achievements connected to ambitions given in the Development Plan. We could have appreciated more of such analysis in English, but we respect the extra work-load that would have caused EMÜ. Most important is that they do this internal evaluations and document

results. Concerning the other indicators of quality, EMÜ did not present or discuss levels of achievement. As long as Estonia relies upon evaluations that are carried out in English, with international reviewers, we will encourage EMÜ to regularly produce such analyses in English.

The (EKKA) standard on quality culture expects the university to conduct internal evaluation regularly at different levels (e.g., institution, unit, study programme) as a support for strategic management. EMÜ carries out quite a few feedback activities. Assessment of teaching and subject courses are carried out at the end of each semester. EMÜ ensured us that the curricula were constantly developing because of input from the students and data from ÕIS. EMÜ reports about self-assessment to EKKA of all curricula in 2015-2018, and that these were quality assessed by external, independent panels (Annual report 2017).

EMÜ identifies 11 indicators for quality (SAR – p. 35):

- 1) indicators of students' academic achievement and success;
- 2) indicators of students' academic mobility;
- 3) indicators of efficiency on admission of new students;
- 4) indicators of applying the RPL-system (recognises previous studies and work experience);
- 5) contemporary social infrastructure for students, incl. living conditions;
- 6) analysis and considering the opinions and suggestions by the personnel and students, also alumni, for developing curricula;
- 7) feedback from the employers; analysis and considering the information for developing curricula;
- 8) the funds and capacity of the library according to the needs for studies;
- 9) academic and research staff participation in teaching skills training;
- 10) results of students' feedback on teaching;
- 11) results of evaluating curriculum groups and institutional accreditation.

If EMÜ has routines to systematically and regularly register the achievements regarding these indicators they were not obvious to us. Even though quality was high in the minds of the people we interviewed, we got vague answers to the question "Quality culture: what does that mean to you?" Even if EMÜ has a smaller number of students, it is a complex organization with as many layers, sub-units and important tasks that are expected of any university. Talking about quality culture, we heard that EMÜ practiced and appreciated "the open-door policy" throughout the organization. One could rise a question if this always is the most efficient and effective way of acting. Without doubt, an open-door culture is beneficial and appreciated among teachers and students and should be preserved. For other quality work, EMÜ should pay more attention to formalize quality indicators, routines and communication that can be documented purposefully to internal as well as external stakeholders.

## Recommendations

- We recommend EMÜ to increase the extent of common ground for quality work processes: which processes should be in place throughout the university, reporting to whom and expected levels of achievement.
- We recommend EMÜ to develop processes for bringing the results from quality work into future developments (routines for follow-up), and the belonging documentation.

- For both these recommendations, the EKKA guidelines for quality culture could show the way: *What do you want to achieve, and why? How do you want to do it? How do you know that the activities are effective and will have the desired impact?* The processes and the results that come from them should be documented and aggregated purposefully from the teachers to the Council.
- We recommend EMÜ to revise the Academic Quality Strategy. The perspective on quality of higher education has changed considerably since 2005, when Academic Quality Strategy was decided upon, thus the panel recommends updating the strategy to be in line with nowadays expectations.

## 1.4 Academic ethics

### Standard:

The higher education institution has defined its principles for academic ethics, has a system for disseminating them among its members, and has a code of conduct including guidelines for any cases of non-compliance with these principles. The higher education institution has a functioning system for handling complaints.

### Guidelines:

*The HEI values its members and ensures that all its employees and students are treated according to the principle of equal treatment.*

*Employees and students of the HEI are guided by the agreed principles of academic ethics in all their activities.*

*The HEI respects fundamental values and policies of research set out in the document, 'Research Integrity', issued jointly by Estonian research institutions, the Estonian Academy of Sciences, the Estonian Research Council and the Estonian Ministry of Education and Research.*

*The HEI supports its students and teaching staff in their understanding and responding to ethical issues. Teaching staff and students do not tolerate academic fraud, including cheating and plagiarism, and they will act immediately upon any such occurrence.*

*Management of complaints from HEI members (including discrimination cases) is transparent and objective, ensuring fair treatment of all parties.*

### Indicator:

- Number of academic fraud cases

conforms to requirements	partially conforms to requirements	does not conform to requirements	worthy of recognition
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## Evidence and Analysis

EMÜ agreed to follow the principles of equal treatment and academic ethics outlined in the Magna Carta of European Universities, Code of Ethics of the Estonian scientists framed by the Estonian Academy of Science and the Law of Authorship Integrity.

One of the main principles of Academic Ethics at EMÜ is: “The University values its membership and ensures the principle of equal treatment of all the employees and students”. In order to ensure equal treatment of all members of EMÜ, various normative documents have been established such as the manual with activities for the institute’s academic affairs specialist. This document regarding the equal treatment of students has been developed and agreed centrally and academic staff follow them in their work. However, the different aspects of equality (including gender equality, equality for staff and students with special needs such as disabilities, mental and physical illnesses, etc.) and the corresponding compensatory measures (e.g. hardship provision) within the academic ethic policies were not specified. The panel has the opinion that more awareness and transparency are needed to ensure that every person of interest knows about their rights and obligations regarding equal treatment as a part of academic ethics. Consequently, comparable and comprehensible decisions can be made according to commonly known core value policies.

The University applies action principles for following values of research integrity. Conduct of research is guided by more specific action principles and more general principles that describe how to make choices without harm to the reliability of the members of the University, the University, or research. EMÜ has identified a contact person at institutes regarding research integrity issues. With regard to research, the University has established clear rules for principles of academic ethics. For example, the applicant for a teaching or research staff position is not allowed to take part in the competition, if he or she has seriously violated the Code of Ethics of Estonian Scientists. The university offers several courses which deal with the principles of academic ethics (Philosophy of science, Research methodology, and Bases of science). Furthermore, seminars and workshops for its members to discuss the issues of academic ethics are organised. The panel values the progress that was made in academic ethic implementation regarding research respecting the fundamental values and policies of research set out in the document ‘Research Integrity’. However, academic ethics has an impact on research, but also other aspects within an institution of high-education, such as academic ethics in teaching and the complaint system should be covered and ensured. It is missing more clear ethical principles related to academic freedom and responsibilities, mutual relationships within the community, loyalty in scope of teaching and study process. Therefore, the panel follows the area of improvement of the SAR to raise awareness and inform all members about the complexity of academic ethics as a whole and that all sections are equally important.

According to the interview sessions, clear guidelines for academic ethics are available on the internet and everybody should be aware of them. More complicated problems are dealt with through the academic committee, but the majority of problems are solved on the level with lecturers and supervisors, who form the first defence line, and, if necessary, by the chair and/or director of the institute. There have only been a few cases of serious complaints over the last five years. There were explanations that the currently accepted equality standards do not discriminate between genders, backgrounds etc., in everyday life treating everyone according to the standard, but a formal framework of equality (gender, nationality, religion, special needs) was missing.

EMÜ has clearly defined the meaning and definition of academic fraud, established the procedure how to act in case of fraud and suspicion of academic fraud. The procedure for contesting and processing the decisions concerning academic fraud and learning activities are regulated by Regulation of Studies (paragraph No. IX.4). Courses in the first semester for all BA students are organised as well the handbook for ethical issues that is available at EMÜ website to increase awareness of academic ethics.



The principles applied at defence processes are well defined. In case the data presented in a thesis is proven to be forged or plagiarised, there is a right to cancel the defence board's decision about awarding the doctoral degree. (XIII.90). To avoid academic fraud/plagiarism the programme KRATT is available to the students. In addition, the students can upload their manuscripts to the programme URKUND where the plagiarism test results are available to the teaching staff. Anyway, according to the SAR there is a low level of acknowledgement of severity of some forms of academic fraud among students, so there is still place for improvement as far as raising awareness is concerned.

Throughout all discussions, it became clear that the university tries to find individual solutions for all kinds of disagreements (such as some individual complaints related to unequal treatment and teaching skills mentioned in the self-evaluation report). The panel acknowledges the open-door policy as a tool for an informal complaint system that is suitable and evidently working for a relatively small university like EMÜ; however the university has to ensure that this informal complaint system is interconnected with the formal complaint system so that systematic problems can be detected, monitored and solved. In this regard, the formal procedures when complaints occur could be explained more precisely. This includes to whom students and staff can appeal, what kind of actions are taken, and which are the responsible persons. The panel suggests a flow chart including all the procedures, responsibilities (incl. student representatives) and feedback loops for dealing with complaints that all groups of interest of the university can access and are informed about.

### Commendations

- Main values and principles of Research Integrity are implemented at all levels;
- Identified authorized employees of institutes that are responsible in terms of issues of research integrity;
- Good tools are implemented and available in a sufficient extent for both the students and the staff to spot academic fraud;
- Open-door policy and informal ways of communication;
- Various contact persons for students and staff when it comes to complaints.

### Recommendations

- The integration of ethical dimension (including honesty, fairness, compassion, confidentiality, conflict of interest, responsibilities) into the whole studies area should be strengthened;
- The assurance of equal treatment should be legally framed in policies and guidelines elaborated on a more detailed level to ensure the transparency and fairness of all groups of interest;
- Raise awareness and transparency and inform all University members about the complexity of academic ethics as a whole and that all sections are equally important;
- Guidelines regarding handling of cases of academic ethic violations should be more widely disseminated among all members of the University, which shall not be limited to plagiarism;
- Awareness on issues of academic ethics by teaching staff should be increased; flow chart of procedures, responsible persons and feedback loops for dealing with complaints at all levels would improve decision making transparency and fairness among all persons of interest;
- Continue raising awareness among students regarding academic fraud and its consequences.

## 1.5 Internationalisation

### Standard:

*The higher education institution has set objectives for internationalisation and assesses the attainment of these objectives regularly. The higher education institution has created an environment that encourages international mobility of students and teaching staff, supporting the development of learning, teaching and RDC activities, as well as the cultural openness of its members and Estonian society in general.*

### Guidelines:

*The HEI creates opportunities for international student exchanges by offering study programmes and/or modules taught in English. The learning environment at the HEI supports internationalisation and cultural openness.*

*Recognition of qualifications and recognition of prior learning and work experiences for student admission and programme completion are in accordance with the quality requirements set by the HEI, are systemic and consistent with the expected learning outcomes and support international student mobility.*

*The organisation of studies at the HEI facilitates student participation in international mobility. The HEI has agreements with foreign higher education institutions and, through international exchange, sends its students abroad to study and undertake practical trainings, providing comprehensive support for this. Members of the teaching staff encourage students to participate in international mobility.*

*International lecturers participate in the process of teaching, including supervision of doctoral theses.*

*The HEI supports and recognises the participation of its teaching staff in international teaching, research or creative projects, as well as their teaching, research or creative work and personal development which are performed at HEIs abroad.*

### Indicators:

- Teaching staff mobility (in-out)
- Student mobility (in-out)
- Number of English-taught study programmes by main units and levels of study

conforms to requirements	partially conforms to requirements	does not conform to requirements	worthy of recognition
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Evidence and Analysis

EMÜ has set ambitious goals for internationalisation evaluated based on the number of (1) teaching staff participating in mobility exchanges, (2) student mobility, (3) number of English-taught study programmes by main units and levels of study, and (4) full-time international degree-seeking students.

EMÜ actively supports international mobility of students and teaching staff as evidenced by the establishment of the International Office within the Department of Academic Affairs; establishing the EMÜ Development Fund (Arengufond) in 2014 to support visits of foreign lecturers and researchers,



development of English curricula and modules, research and study visits abroad; and offering informational sessions to first-year students and through study programmes about mobility opportunities and advice for the planning of semester/year abroad experience.

As of October 2018, EMÜ maintains 253 Erasmus bilateral agreements for student and/or staff mobility with HEIs within European Higher Education Area (EHEA) and 19 cooperation agreements with universities outside EHEA. Moreover, there is growth in the number of international lecturers that reached 30 in 2017, from 20 in 2012. In this regard, EMÜ should consider if the study fee for international study programmes is in line with the EMÜ internationalization strategy and is not a hurdle for students to enrol in an international programme. Other indicators of efforts toward internationalization point to positive trends such as the number of: course syllabi in English (from 147 of them in the 2013/14 academic year to 279 in 2017/2018), incoming exchange students (from 147 in 2013/14 to 182 in 2017/18), matriculated international students (from 182 in 2014 to 248 in 2018). Beyond statistics tracking international engagement activities, EMÜ students, teaching staff and external stakeholders recognize and highlight the recognition of its education programmes for their reputation of bringing theory and practice into applied science programmes which is recognized abroad. This was evidenced by the number of EMÜ graduates and soon-to-graduate students who have participated in mobilization programmes and about to enrol in advanced studies abroad. However, EMÜ should develop more concrete strategies on how to include more English-teaching in their courses. As noted previously, the University has made major progress in the availability of course offerings in English – prior to 2014 there were only a few courses where actual coursework took place in English (SAR – p. 41). The University also offers a course titled ‘Teaching Academic Subjects in English’ to support even greater offerings of coursework in English. However, as mentioned during various interviews, some teaching faculty remain hesitant to convert some of their course contents to English. To support such a goal of greater course offerings in English and wider internationalisation, EMÜ should maintain current hiring requirements and development opportunities to assure English-proficiency among all support staff (e.g. academic units, student counselling) to better serve international students and faculty.

As noted in EMÜ’s SAR and confirmed during on-site interviews, opportunities to better integrate Estonian and international students are available in (a) the learning process, (b) student life services, and (c) socially. EMÜ and its members are evidently working toward improving greater student integration as noted by the creation of University International Club; also, specific international culinary events and the upcoming hosting of a global meeting of the International Forestry Students’ Association by undergraduate students. Greater advancement on integration of Estonian and international students will contribute to the cultural openness at EMÜ’s and in Estonian society in general.

### Commendations

- EMÜ actively supports internationalisation by allocating instrumental financial and human resources as illustrated by the creation of the International Office among other institutional resources (e.g. language support, financial support to mobility).
- EMÜ has developed a culture where programme internationalisation is valued and steps are being taken to reduce current barriers to greater student and staff mobilization.

- EMÜ students and graduates, as noted from interviews, are highly regarded abroad for their knowledge and practical skills easing their professional and academic development to pursue MSc and PhD degrees.

### Recommendations

- EMÜ should strive to better integrate international and Estonian students to promote societal cultural openness. For instance, as noted in the SAR, there is “a Special feedback system for international students”. Having separate systems can potentially counter efforts for greater integration.
- EMÜ should continue the implementation of courses and programs that enhance English-proficiency among academic and support staff (e.g. student counselling) to better serve international students.

## 1.6 Teaching staff

### Standard:

Teaching is conducted by a sufficient number of professionally competent members of the teaching staff who support the development of learners and value their own continuous self-development.

### Guidelines:

*Members of the teaching staff engage systemically in development of their professional and teaching skills, improve their supervision competence, and share best practices with one another.*

*Teaching staff's participation in research, development and/or creative activities supports the teaching process and ensures competence for the supervision of students' theses (including doctoral theses).*

*Members of the teaching staff collaborate in fields of teaching, research and/or creative work within the HEI and with partners outside the HEI, e.g. with field practitioners, public sector organisations, companies, other research and development institutions, and lecturers from other Estonian or foreign higher education institutions. Qualified visiting lecturers and practitioners participate in the teaching process.*

*When assessing the work of teaching staff (including their periodical evaluations), the effectiveness of their teaching as well as their research, development and creative work is taken into account, including student feedback, the effectiveness of their student supervision, development of their teaching and supervisory skills, their international mobility, and their entrepreneurial experience or other work experience in their fields of speciality outside the HEI.*

### Indicators:

- *Competition for elected academic positions*
- *Results of students' feedback about the teaching staff*

- *Teaching staff participating in continuing training or other forms of teaching skills development*

conforms to requirements	partially conforms to requirements	does not conform to requirements	worthy of recognition
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Evidence and Analysis

Teaching at EMÜ is conducted by a sufficient number of professionally competent teaching staff who actively support the development of learners. As evidenced during interviews and in the SAR, teaching staff clearly value and are offered adequate opportunities for continuous self-development. EMÜ has established university-wide opportunities to develop and share teaching competencies as illustrated by EMÜ-wide seminars “From lecturer to lecturer”, “Tests and gradebook in Moodle” and “Tests, feedback and group work without Moodle”.

Number of academic staff has remained around 450 individuals over the 2013-2017 period and the gender balance in the most recent data (SAR – p. 10) is noteworthy. The number of academic staff holding a Ph.D. has remained levelled throughout the same period with an actual slight net loss of 23 individuals at this academic rank dropping to 223 in December 2017 as compared to 246 the same month in 2013. Given the government mandate for teaching staff to hold a Ph.D. this might present a challenge to EMÜ. The University has, nonetheless, made progress in attracting more international academic staff – there were 24 international academic members of staff in 2014 as compared to 30 by the end of 2017.

EMÜ teaching staff closely collaborate in fields of teaching, research and/or creative works also engaging academic peers in other higher education institutes and stakeholders, including alumni, ministries and private-sector entrepreneurs. Internationally, the university works most closely with University of Helsinki (Finland), Czech University of Life Sciences, (the Czech Republic), Swedish University of Agricultural Sciences (Sweden) and Norwegian University of Life Sciences (Norway). Qualified visiting lecturers and practitioners participate in teaching at EMÜ. Outside teaching staff, including internship supervisors, are offered training on the assessment of learning and their own mentoring competencies as illustrated by the course “Training for enterprise internship supervisors”.

Teaching staff’s annual evaluation with programme chairs consider teaching assessments, including student feedback in the Study Information System, the effectiveness of their student supervision and development of their teaching and supervisory skills. Opportunities for greater consistency in teaching staff evaluations conducted at each institution and the systematic participation of teaching staff in the self-development of professional and technical skills are available. Results of the most recent satisfaction 2017 survey among teaching staff, as noted in the SAR report and mentioned during interviews, seems to suggest that lecturers and assistant professors look for additional opportunities for self-development. Among more senior teaching staff, including professors and associate professors, there are opportunities for greater participation in innovative teaching-technique training was noted during the oral testimonies.

### Commendations

- EMÜ has a motivated teaching staff recognized for their capacity to interlink theory and practice in applied science programmes.
- In addition to formalized student feedback, oral testimonies suggest that EMÜ has both a valuable informal approach and a formal feedback systems to teaching staff by individual students to chairs and through student union council and study-programme specific student associations.

### Recommendation

- EMÜ has already established and implemented opportunities for teaching staff self-development. However, as became evident during interviews and as noted in the SAR, teaching staff could more effectively and systematically make use of these self-development resources. Therefore, the university could implement further incentives for good teaching and correspondingly increase the value of teaching distinct from research.

## 1.7 Study programme

#### Standard:

Study programmes are designed and developed while taking into account the expectations of stakeholders, higher education and professional standards, and trends in the relevant fields. The objectives of study programmes, modules and courses and their planned learning outcomes are specific and coherent. The study programmes support creativity, entrepreneurship and development of other general competencies.

#### Guidelines:

*In planning study programmes and student places, the HEI pursues its objectives and the needs of the labour market, and takes into account national strategies and the expectations of society. The planned learning outcomes are in accord with the requirements for the corresponding level of the Estonian Qualifications Framework. Expected student workloads defined in the study programmes are realistic and consistent with the calculation that 1 ECTS credit equals 26 student learning hours. Theoretical learning and practical learning are interconnected. The content and organisation of practical trainings support the achievement of learning outcomes of the study programme and meet the needs of all parties.*

conforms to requirements	partially conforms to requirements	does not conform to requirements	worthy of recognition
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## Evidence and Analysis

Evidence: Interviews with staff and students and the self-evaluation reports of programmes MSc Landscape Architecture (MScLA), BSc Forestry and the MSc Production and Marketing of Agricultural Products, and the Development Plan. The development and opening curricula ensure that the study outcomes of bachelor's and professional higher education curricula are in accordance with the qualification framework level 6, and Master's study programmes with the general requirements of level 7 (SAR – p. 51)

EMÜ is the only HEI in Estonia offering science-based higher education in the fields of agriculture and forestry, animal science, veterinary medicine and food science (SAR – p. 51).

EMÜ and alumnus of EMÜ actively supports the research-based education of MSc curriculum as evidenced by the (1) conducting of international competitions for academic positions, involving foreign post-doctoral researchers; (2) establishment a special fund to support inviting foreign professors to teach and the amortization fund to keep the high-end technology running; (3) encouraging international networking; (4) participating as experts in FAO, OECD committees as well nationally, consulting Ministry of Rural affairs.

As noted during visits with University Administrators, the implementation of an 'open door' policy facilities receiving feedback from students, faculty, staff and external stakeholders. This is extended to the flexibility in revising academic programmes to implement relevant topic from the job market in the curriculum to also prepare the students for future job perspectives. For instance, the Forestry curriculum has been reorganized to increase coherent and logical connections between courses and has involved internal and external stakeholders along this process. The MSc Production and Marketing of Agricultural Products curriculum is also designed, developed and continuously updated by the Curriculum development committee, departmental staff, while taking into consideration the expectations of stakeholders (business units, student's representatives, including Association of Agricultural Enthusiasts), higher education and speciality standards, changes in labour market, University Law, students' feedback.

As it was evident during oral testimonies and as disclosed in the SAR (p. 39) the development of programme curricula across the university involves representatives of both students and employers/entrepreneurs through different decision-making bodies. Across EMÜ it has been noted (SAR – p. 39) that the "process of making changes in the curricula and study process should be faster to better comply with changes in the society".

Generally the curricula are designed, developed and continuously updated by the Curriculum development committee, departmental staff, while taking into consideration the expectations of stakeholders (business units, student's representatives, including Association of Agricultural Enthusiasts), higher education and speciality standards, changes in labour market, University Law, students' feedback.

EMÜ has started to reduce the number of curricular programmes in the environmental and biosciences curriculum group, based on proposals by the curriculum analysis and strategic development working group and the committees of the curriculum groups' quality assessment.

Even though EMÜ is the only HEI in Estonia offering science-based higher education in in the fields of agriculture and forestry, animal science, veterinary medicine and food science, the interest in Life Sciences among the younger generation is quite low. With the low number of students due to the

demographic situation in Estonia, EMÜ should review recruitment strategies in an attempt to widen the recruitment but also to stimulate existing students to fulfil their studies.

There are differences between the study programmes. In the MSc Production and Marketing of Agricultural Products the objectives of study programmes, modules and courses and their planned learning outcomes are specific but lacking coherence. The MSc LA on the other hand, had a coherent programme of modules.

Creativity and entrepreneurship is encouraged in the various curricula in the ambition to encourage people to start their own companies. This includes student participation in internships, in the preparation theses and through applied research under the tutelage of various faculty members promoting their critical and creative thinking. There is an effort to encourage critical thinking and communication skills among students as key professional competencies in their research and presentations of theses and assignments. There was evidence however, that students would appreciate more subjects and activities developing entrepreneurship skills (oral testimony by the students). To develop the entrepreneurial attitudes of students and the acquisition of the knowledge and skills, the University has started to integrate an entrepreneurship module into curricula. By the academic year of 2020/2021, all of the first study level curricula must include this module in volume of 8 ECTS (SAR – p. 52).

The impact of the incoming educational legislation had not been discussed widely and so the teaching teams were unclear about the opportunities provided by the strategic plan. As noted in the SAR (p. 21) “EMÜ is responsible for the development of the Estonian bioeconomy in the fields of agriculture, environment, forestry, food and health, technology and rural economy”. Across the University, the bioeconomy as a concept and as part of the institutional strategic plan offers an opportunity to further creative and entrepreneurial opportunities, but the potential value of the concept of the bioeconomy for example, had not yet significantly influenced the teaching programmes’ culture.

### Commendation

- A range of professionally-recognised, valued study programmes that have a national and international reputation and are responsive to national and international requirements.

### Recommendations

- As noted in EMÜ’s SAR and confirmed during on-site interview with the Director of Institute and study programme developers to be internationally recognised university in the field of bio-economy there are opportunities (1) faster integrate globally relevant agronomic and marketing issues in the curricula; (2) better balance between production and marketing of agricultural production subjects in the curricula; (3) develop more subjects in English language.
- Review recruitment strategies in an attempt to widen the recruitment but also to stimulate existing students to fulfil their studies.

## 1.8 Learning and teaching

### Standard:

Admissions requirements and procedures ensure fair access to higher education and the formation of a motivated student body. The higher education institution systemically implements a student-centred approach that guides students to take responsibility for their studies and career planning, and supports creativity and innovation. Graduates of the higher education institution, with their professional knowledge and social skills, are competitive both nationally and internationally.

### Guidelines:

*The teaching process takes into account students' individual abilities and needs, and supports their development. Organisation of independent work and classroom teaching motivates students to take responsibility for their studies.*

*Teaching methods and learning aids used in the teaching process are modern, appropriate and effective, and support development of a digital culture.*

*Students are motivated to learn and contribute to improving the quality of their studies by providing meaningful feedback on both the learning process and the organisation of studies.*

*Doctoral students plan their studies, as well as their research and development activities, in collaboration with their supervisor(s), setting specific objectives for each year and assuming responsibility for achieving those objectives.*

### Indicators:

- *Student satisfaction with the content and organisation of studies*
- *Alumni satisfaction with the quality of studies*
- *Employer satisfaction with the preparation of the graduates*

conforms to requirements	partially conforms to requirements	does not conform to requirements	worthy of recognition
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Evidence and Analysis

EMÜ has stated admission conditions and procedures to select students as part of its quality assurance. Admission into EMÜ programmes is accessible online to prospective students at <https://www.emu.ee/en/admissions/>. However, clear admissions requirements may not be available for all study programmes and prospective students. For instance, admission into the Forestry programme seemed clear and accessible to prospective students with a family tradition in the Estonian forest sector. However, these may not be so clear to those without a background in Forestry or from outside Estonia as mentioned during oral testimonies.

Admission requirements are approved by the University Council and updated annually. In admission to the MSc studies the graduates of agriculture-related specialties are admitted on the basis of their average grade on the diploma and the grade for their BSc examination or BSc thesis (SAR – p. 95). State financed places are guaranteed by competition (Academic quality strategy: II.5. 1-4). All relevant information is on the university's website ([www.emu.ee](http://www.emu.ee)). Staff disseminate information about the



programmes through personal contacts and international fairs (interviews with teaching staff and students). Admission is conducted on the basis of the admission results of the public competition via the admission information system (SAIS). International candidates apply through DreamApply. Some exchange students stay at EMÜ after the agreed exchange period (interview with students). The University is focusing on how to attract the most motivated and competent students and has therefore developed a good marketing strategy, identified target groups for potential students and visited schools and local communities to encourage recruitment (interviews with management and employers). The university organises preparatory courses (SAR), selects students by admission test, motivation letters and ECTS. (SAR). Despite these strategies, EMÜ struggles with a dramatic reduction in student numbers (SAR). Life Science studies (except veterinary) are not always the applicants' first choice and therefore the university has difficulties to comply with the government's agreed number of students (interviews with management and teaching staff). As a result, the admission level is often lower than preferred.

EMÜ focuses on e-learning, e-studies and introducing teachers with training to be prepared teach by innovative methods (SAR). Teaching is focused on problem based learning (SAR – p. 54, p. 97) and practical training (SAR – p. 54), for example: Woodworking Technology curriculum has course at Võru Country vocational training centre (SAR – p. 55), organized field practices (SAR – p. 84, p. 86), Rural Entrepreneurship and Financial management study programme involves collaboration with enterprises as core for learning through the experience of practitioners (SAR – p. 54), research station in Eerika an Rohu for practical compound while studies of Production and marketing of agricultural products (SAR – p. 94) or done as internships for students of Landscape Architecture (SAR – p. 106).

Teaching methods vary according to the teacher. Teachers depend largely on evidence-based research (SAR – p. 85, p. 97, p. 107) with students learning to think creatively to apply this knowledge during discussions, seminars, tutorials and one to one talks. For example, in Landscape architecture, teaching is split 50/50 teaching theory and studio projects (teachers' panel). Teachers explained that new innovative learning methods are understood as "no more lectures, using practical issues, discussing outside", and blended learning.

The changes in Forestry study programme curricula (SAR – p. 87) have been introduced in order to increase the students' responsibility for planning their studies and career, and supporting the development of key competences in forestry. The personal interests and preferences of students are taken into consideration (SAR – p. 55), possibility for choosing specialization (SAR – p. 85), or to take credits according own choices (SAR – p. 96), selecting own topics for thesis (SAR – p. 106) exist. As the strength of Forestry study programme (SAR – p. 87) is mentioned, that changes in curricula have been introduced in order to increase the students responsibility for planning their studies and career, and supporting the development of key competences in forestry.

The panel noted that the content of learning outcomes need improvement to reflect an appropriate level of masters learning based on analysis, description and synthesis. Learning outcomes of provided study programmes are described as teaching centred rather than student oriented approach by referring to "know", "be familiar" or "understanding" (SAR; Annex 1. Forestry). The learning outcomes of the Crop production and marketing curriculum are designed as student centred approach, while the outcomes of the master's thesis are referred mostly as "knows" (SAR; Annex 2. Crop Production and Marketing), rather than demonstrate knowledge and abilities to apply or ability to integrate, analyse and etc. Anyway, EMÜ has outstanding results which apply to Landscape architecture study programme curriculum description and design (SAR; Annex 3. Landscape Architecture), therefore the best practices existing among different EMÜ departments and study programmes should be shared and discussed on daily bases considering internationally agreed definitions (for example Bloom's



taxonomy). In general, the panel were not provided with explicit examples where a student-centred approach to teaching and learning was employed. Only landscape architecture described a student-centred approach, evidenced by the appropriate learning outcomes. Generally, an understanding of a concept of student-centred approach and student-oriented teaching was missing. From the interviews it is clear that a range of staff development courses are needed to encourage more active learning methods and approaches to pedagogy.

Apart from the design courses, modules and subjects end either with a credit test, essay, practical work or examination. The panel heard in the interviews that formulation of assessment methods and criteria is a team effort that includes syllabus responsible lecturer and faculty members. The Department of Academic Affairs is responsible for confirming the uniformity of assessment methods and criteria with the learning outcomes (SAR; oral testimony by teaching staff).

In most of the cases the teaching content, methods, assessment criteria and methods support students in achieving their learning outcomes and developing their key competencies. Teaching content seems interdisciplinary and closely related to research conducted at the institutes. Students are involved in research projects, including practical projects, providing them with topical graduation themes. In collaboration with enterprises, problem-based learning implemented. Guest teachers (practitioners, alumni, entrepreneurs, researchers) in teaching are involved, what increase desire and interest in acquiring study or practical experience (SAR – p. 54). Students appreciate learning through the experience of practitioners as well (oral testimony by the students). A wide range of teaching and learning methods are used and highly valued, including study tours, visits (SAR – p. 97, p. 106), group work, individual projects, lectures and tutorials (SAR – p. 55, p. 84, p. 96), field tests (SAR – p. 93), individual learning (SAR – p. 94). Some concerns were raised about the extent of group work, the assessment of an individual's contribution to group work.

EMÜ has implemented a number of measures to make the feedback from the study information system (ÕIS) more effective and relevant. **Feedback on learning process (twice a year), student's satisfaction with subjects and teaching results are used for opening new or updating curricula, improving internships organisation (SAR – p. 57) or discuss study materials, teaching skills (SAR – p. 93), student's work load (SAR – p. 107).** The panel heard that solving the problems related to asking for feedback on teaching and learning is a very complicated task, but EMÜ is continuously working on its development and making it more constructive. **Anyway, fostering learning, the emphasis on the students taking responsibility and power for their own learning should be strengthened and prioritised.** New system - feedback should become more student-centred, in which the student evaluates subjects and the learning process through self-analysis is planned to be introduced in 2019 (SAR; oral testimony by the DAA staff).

EMÜ is well situated to consider the special needs of students, providing advisory services (psychologist, mentoring, international department) and if needed individual counselling. During the meetings all groups mentioned the strong and supportive family atmosphere and appreciated their first contact person, either a person at international department or the programme leader for Estonian students. The support systems were highly valued by students, (particularly the Erasmus coordination office) and the counselling service. However, the low English language level of some of the support staff might make providing quality services for foreign students difficult.

There were good examples of a range of teaching methods, for example in landscape architecture, using research from Uzbekistan to introduce problem solving tasks (e.g. restoration ecology), using new technological or digital ways of instantly getting feedback from students. In addition there was evidence in the interviews of many ways of improving teachers competences through time

management courses, coaching, EMÜ organised teaching seminars, pedagogical training and providing prizes and awards, some of which were financed by Nordplus.

Each study programme has its own approach. Teaching methods and learning aids used in the teaching process within the Forestry programme seem appropriate and effective and as noted in the SAR (Section 4.1 Forestry, BSc) investments for renovation of classrooms and updating teaching devices have been made since 2013. Teaching and assessment methods are diverse ranging from traditional examinations, assignments, coursework, group projects, among others, and support students in achieving their learning outcomes as reported in the SAR and as evidenced from a sample of syllabi provided during the review team on-site visit.

A Chair may offer opportunities for teaching development and ways to address students' concerns. All teaching staff are offered opportunities to participate in self-development courses. Peer-to-peer learning of innovative teaching happens through optional campus-level training and in less formal settings - as mentioned by a faculty member 'the coffee room is the best platform to learn about new teaching techniques'.

Forestry students' feedback points for the need of improvement in some subjects (SAR – p. 90). Based on oral testimony, Chair professors within the Forestry programme take into consideration effectiveness in teaching, student feedbacks, international mobility, among other evidence of performance during annual evaluations. When issues regarding ineffective teaching are raised in student evaluations, each Chair meets with the corresponding member of staff and tries to gain a better understanding of the issue at stake. This level of qualitative assessment complements conventional student evaluations.

Generally alumni were satisfied with the knowledge and skills acquired from their study programmes and appreciated how well prepared they were for work in a wider context. They felt that most information was useful and, because of that, they felt well prepared for their jobs. Alumni are very satisfied with practical skills of graduates. Close cooperation with enterprises and companies encourages a problem-based approach into the study process. The close cooperation between university and employers is evident in the continuing relationship alumni have as EMÜ stakeholders through alumni meetings, EMÜ interdisciplinary studies and by their involvement in teaching and students' research projects. As stakeholders, their main concern is for the university to have a clear vision and leadership to prepare students for the future labour market and meet Estonia's needs in the long term.

### Commendations

- The strong, well respected range of supportive structures for staff and student development.
- The excellent facilities for teaching and learning.
- Focus on practical training, teaching closely related to research.

### Recommendations

- Strengthening the perception of student centred approach as core for learning and teaching activities.
- Content of learning outcomes should be described using the learning taxonomies in student centred approach.

- Pedagogical training is needed to improve the implementation for a student centred approach. In order to encourage teachers to participate incentives should be presented by EMÜ.
- Clearly define criteria for group work assessment to enable to assess each participants' individual work as well.
- The English language level for some of the support staff needs to be improved in order to provide quality services for foreign students.

## 1.9 Student assessment

### Standard:

Standard: Assessments of students, including recognition of their prior learning and work experiences, support the process of learning and are consistent with expected learning outcomes. The objectivity and reliability of student assessments are ensured.

### Guidelines:

*The assessment criteria are understandable to students and students are informed about them in a timely manner. Members of the teaching staff cooperate in defining assessment criteria and apply similar approaches.*

*Assessment methods are versatile and relevant, and assess the degree of achievement of learning outcomes (including general competencies).*

*If possible, more than one staff member is involved in the development of assessment tasks and student assessments. Along with assessments, students receive feedback that supports their individual development.*

*The HEI supports development of the teaching staff's assessment competencies.*

*Evaluation of doctoral students is transparent and impartial. Its purpose is to support the development of doctoral students, to assess the effectiveness of their current work and to evaluate their ability to complete the doctoral studies on time and successfully defend their doctoral theses.*

*When recognising prior learning and work experience towards the completion of the study programme, results obtained through the studies and work experiences (the achieved learning outcomes) are assessed.*

*Students are aware of their rights and obligations, including the procedures for challenges regarding assessments.*

### Indicator:

- *The number of credit points applied for and awarded under the accreditation of prior and experiential learning scheme (APEL); this does not include credit points transferred from a different study programme at the same HEI.*

conforms to requirements	partially conforms to requirements	does not conform to requirements	worthy of recognition
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## Evidence and Analysis

The assessment of students, including student's previous studies and work experience, is based on regulations of the Ministry of Education and Research, and Regulation of Studies confirmed by EMÜ Council. Contestation of the results of the final examination and the final thesis are regulated by the Regulations of the University Council: „Requirements and Procedure for the Awarding of BSc and MSc Degrees and Diplomas of Professional Higher Education at the Estonian University of Life Sciences“ and „Conditions and Procedure for Awarding Doctorates“.

The modules and subjects end with either a credit test, essay, practical work or examination. Assessments may be formative or summative; and all parties appear happy with the balance between the two (oral testimony by teaching staff and students). The panel heard in the interviews that formulation of assessment methods and criteria is a team effort that includes syllabus responsible lecturer and faculty members. The Department of Academic Affairs is responsible for confirming the uniformity of assessment methods and criteria with the learning outcomes (SAR; oral testimony by teaching staff). The panel revealed that the assessment methods in most of the subjects are not linked to and do not support the achievement of learning outcomes, including general competencies, and assessment criteria with a more descriptive profile are lacking (SAR; oral testimony by teaching staff). It is, for example, not clear:

- a) how the “Composition of the Final Assessment” which identifies that all assignments in seminars and practical works should be passed, defence of the written report to get to the exam and positive result for exam is 51% right answers with grade E 51...58,5; D 59...69,5; C 70...78,5; B 80...88,5; A 90...100 % right answers” is connected to the learning outcomes of the course of Sustainable crop husbandry and organic farming? Is the exam questions / answers judgment equal to learning outcomes achievement level? The same for the courses “Advisory service and systems”; “Environmentally friendly plant protection”; “Food policy and strategies”; GIS applications in agriculture.
- b) which assignments cover which learning outcomes, especially practical ones for the course “Environmentally friendly plant protection”.
- c) what would be a positive result for the exam for the course “Food policy and strategies”.

The panel concluded that the evaluation system provides signs that students are probably learning, but the evidence of exactly what they are learning less clear.

Students at BSc and MSc level defend a thesis. A procedure for the assessment and organisation of the thesis is available. The panel saw a collection of theses and confirms that these procedures are in place.

The syllabus with the assessment methods and criteria are available on the study information system (ÕIS) before the start of the new academic year; the panel saw a short demonstration of this system. Students are allowed a second resit on examinations or credit-bearing tests. The panel noted that to facilitate the objectivity and reliability of the assessment only 50% of EMÜ subjects are taught by two or more lecturers. The panel heard that the involvement of several lecturers in teaching and assessing a subject facilitates the objectivity and reliability of the assessment (oral testimony by the teaching staff, SAR). Therefore to assure assessments' objectivity and reliability a greater extent of courses taught by 2 or more lecturers has to be introduced at EMÜ.

Students' previous studies and work experience is one of the strategic indicators used for monitoring of the strategy fulfilment (oral testimony by DAA staff). The RPL Commission awards recognition of

prior learning and work experience. The panel noted that a ratio of number of credit points applied and awarded by accreditation of prior learning and work experience is growing since the year 2013 (91,3%) – 2018 (97,5%), except for the year 2015 (4,1%) (SAR).

EMÜ supports the development of faculty members' assessment competencies. There is a possibility for teaching staff to participate in trainings with the support of various projects (ASTRA) and in trainings with subcontracted trainers from University of Tartu, University of Tallinn. Internally, in order to share best practices and learn from one another, series of seminars From lecturer to lecturer, Teaching Skills Development Seminars, were launched at EMÜ (2016 – 2017) with support of university's educational technologist, who trains and introduces various methods and digital tools as well (oral testimony by teaching staff, DAA staff). The panel heard that the good practice of sharing the experience and acquiring the knowledge of teaching/assessment skills when attending colleagues' lectures stopped in 2013 (oral testimony by teaching staff and students).

EMÜ has developed principles for assessing internships, including a supervisor from the business institution who provides feedback during the internship (in questionnaire). The internship has specific guidelines and it ends with both the student and the representative of the host institution submitting an evaluation report. The panel heard that students found the internships a very useful experience as preparation for their subsequent careers (oral testimony by the students' representative). The quality assurance system for internship performance and assessment includes trainings for the enterprise's internship supervisor on the objectives, organization and assessment of the internship, as well as trainings for institutes' internship supervisors, e.g. in 2017 (oral testimony by the teaching staff).

Lecturers' feedback is given to the students to support students' development. The panel revealed that in some instances, when supervising large study groups, the feedback given to students is not detailed enough (oral testimony by the teachers). The panel heard that the feedback giving system is not informative enough to understand to what extent the subject learning outcomes had been reached (oral testimony by the students).

### Commendation

- EMÜ supports the development of faculty members' assessment competencies.

### Recommendations

- In order to make student assessment more transparent there is a need for update in assessment methods to be more linked to and support the achievement of learning outcomes, including general competencies, and assessment criteria have to be more detailed described.
- In order to make learning / teaching more efficient there is a need to elaborate clear system for giving feedback to students on learning outcomes achieved.
- Consider reinstating the good practice of attending colleague's lectures in order to share experience and acquire knowledge.

## 1.10 Learning support systems

### Standard:

The higher education institution ensures that all students have access to academic, career and psychological counselling. Students' individual development and academic progress are monitored and supported.

### Guidelines:

*The HEI assists the student in developing an individual study programme based on the student's special needs as well as educational abilities and preferences.*

*The HEI advises its students (including students with special needs and international students) on finding practical training places as well as jobs. Students are aware of where to get support in the case of psychological problems.*

*The HEI has a functioning system to support and advise international students (including psychological and career counselling) which, inter alia, helps them integrate smoothly into the membership of the HEI and Estonian society. The HEI analyses the reasons students withdraw from studies or drop out, and takes steps to increase the effectiveness of the studies.*

*The HEI supports student participation in extra-curricular activities and civil society initiatives.*

*The HEI monitors student satisfaction with the counselling services provided and makes changes as needed.*

### Indicators:

- The average duration of the study by levels of study
- Dropout/withdrawal rate

conforms to requirements	partially conforms to requirements	does not conform to requirements	worthy of recognition
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Evidence and Analysis

The panel found that EMÜ has developed learning support systems within the areas of learning management, performance, decision making, self-learning (SAR).

The assessment panel noted commitment of the top management to an open-door policy, where the possibility to reach out the top university leaders is available to each member of the EMÜ community. This creates a trustable atmosphere, enhances openness when developing and adopting learning support systems geared toward individual community member respecting their backgrounds and personal interests.

The panel found evidence of a learning management support system that is acknowledged by the students. This includes the implementation of organisational learning and educational controlling measures, involvement of practitioners in the learning process, well-balanced theoretical and practical training in the curricula and maintenance of the network of practice companies (oral

testimony by SA, teaching staff, DAA staff). Academic affairs specialists, directors of the institutes, discipline specialists, internship curators together with group leaders-chairs, learning support structures representatives and students' representatives are involved in the processes.

Academic counselling includes introductory courses on the organisation of the university, the curriculum structure, exposure to practical experience at BSc, MSc curricula (oral testimony by DAA staff, Students). This helps to ensure that students understand the studies' organisational principles, the curriculum structure and various learning support measures that are implemented at EMÜ to guide and help the students (DAA staff, support structure staff). Students informed the panel that early dropout rates result from misunderstanding of the learning outcomes and the content of the programmes, but late dropouts are due to economical and personal reasons. The panel therefore encourages EMÜ to tackle the student's dropouts in a more detailed root cause analysis for economic reasons and to plan preventative measures for the support systems or more efficiently connect the already existing ones. As a preventative measure for early dropouts, the panel encourage EMÜ to establish transparent and easily accessible target group specific communication of learning outcomes for the future students (oral testimony by students, teaching staff).

Students' academic progress is monitored twice a year by the institute's academic affairs specialist, and, in case of difficulties, the student is contacted more often (oral testimony by teaching staff, students). Students informed the panel that the university personnel regularly collect feedback on their satisfaction at EMÜ. Satisfaction with academic counselling is a part of the feedback questionnaire on the curriculum, completed by soon graduates immediately before graduation. E.g. 76.36% of graduates were satisfied with the level of teaching and teaching staff. Graduates of the field of agriculture and social sciences, business and law were most satisfied with teaching; the percent was over 80% (SAR).

The panel found evidences of a performance and self-learning support system such as e-learning, and flexible study attendance (in sessions). As evidence supporting students' development regarding the soft skills the panel was introduced with library premises and librarians conducting training courses on using the library and online resources. Students also receive help when it comes to finding an internship position and being supervised (oral testimony by SA, representative of support structure during the tour of facilities).

The proportion of different electronic environments that support learning process increases year-by-year (currently there are more than 600 e-courses in Moodle or other web-based means. Students' feedback reveals that this support for subjects is very relevant and effective for the self-study time (oral testimony by teaching staff).

The university representatives (oral testimony by directors, teaching staff) informed the panel that all students including those with special needs and disabilities are guaranteed access to all study facilities (recent building and premises upgrade for easy access).

The panel found evidence of implemented a decision-making support system, such as an expert career guidance. The career counselling is provided by a career specialist who mediates career information, performs individual counselling on career planning and personal development, as well conducts thematic seminars and lectures involving guest lecturers (oral testimony when meeting with the career specialist). EMÜ students are very welcome on the agricultural labour market, where graduates, who successfully attended studies both at Estonian agricultural school and EMÜ (oral testimony when meeting with the alumni) are highly appreciated. Satisfaction feedback on the career counselling is asked immediately after counselling (oral testimony by the representatives of support



structures, DAA staff). The career specialist and psychologist submit a report (number of counselling sessions, content, main concerns and suggestions) to the head of the DAA at the end of the spring semester. The report forms the basis for planning future activities (topic seminars) and improving the quality of the counselling service (SAR).

In case of mental health problems, a psychologist will advise students, including students with special needs, in coping with challenges during their studies or in their personal lives. In spite of the fact that all students are equally entitled to receive study counselling, career and psychological counselling (SA report p.40), the panel noticed a lack of foreign language (English) competent personnel that was able to counsel international students (oral testimony when meeting with psychologist, career specialist). The panel found that separate support services/events for local and international students co-exist, the level of interaction of Estonian and international students do not satisfy all the interested university parties (oral testimony by students, meeting with a psychologist).

### Commendations

- Social programmes, activities and special support facilities (incl. social and recreational events) for international students are implemented.
- Estonian language courses for foreign students are introduced.
- Students' extracurricular activities and civil social initiatives are supported by EMÜ.

### Recommendations

- The counselling personnel needs to improve their English skills or additional English speaking staff should be hired in order to be able to help and guide international students.
- EMÜ should clearly communicate learning outcomes for future students in order to decrease the number of drop out due to misinformation.
- Identify root causes of early and late student dropouts and implement preventative arrangements into existing learning management, performance and decisions making support systems. Pay special attention to the financial situation of students and how this is negatively influencing their study progress.

## 11. Research, development and/or other creative activity

### Standard:

The higher education institution has defined its objectives and focus in the fields of RDC based on its mission, as well as on the expectations and future needs of society, and assesses their implementation and the societal impact of its RDC activities. RDC supports the process of teaching and learning at the higher education institution. Support services for RDC are purposeful and support implementation of the objectives



of the core process.

**Guidelines:**

*The HEI places a high value on the role and responsibilities of the field of RDC in society and evaluates the results of its RDC activities, their international visibility and societal impact.*

*The HEI responds flexibly to the current needs of society and the labour market in terms of its research and plans its research in collaboration with enterprises, public sector institutions and organisations of the third sector.*

*Members of teaching staff introduce students to their research results as well as the latest scientific achievements in their areas of specialisation, and involve students in their R&D projects where possible.*

*The organisation and management of RDC take into account thematic differences and the mission (profile) of the HEI.*

**Indicators depend on the specificities of the HEI:**

- Numerical data: (1) scientific publications by classifiers; (2) public presentations of creative work; recognition from international competitions; reviews in professional publications, etc.; (3) patent applications, patents; (4) textbooks, study aids of various formats, etc.; (5) system development solutions; product development solutions; environmental applications solutions; (6) contracts concluded with enterprises; (7) spin-off companies, etc., in line with the profile and priorities of the HEI; etc.
- Number of scientific publications / creative works per member of academic staff and per employee with the requirement to do research (FTE, by areas)
- Number and volume of externally funded projects of RDC activities

conforms to requirements	partially conforms to requirements	does not conform to requirements	worthy of recognition
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Evidence and Analysis

EMÜ highly values the role and responsibilities in research, development and/or other creative activity (RDC) for society and evaluates the results of its RDC activities, their international visibility and societal impact. The international academic quality and visibility is well illustrated by the high international ranking (c. 55) in the field of Agriculture and forestry of the QS World University ranking (<https://www.topuniversities.com/university-rankings/world-university-rankings/2018>).

EMÜ responds flexibly to the current needs of society and the labour market. Entrepreneurs and other stakeholders not only give guest lectures and provide internship possibilities for BSc and MSc students, but are also consulted for curriculum development. This way, the curricula are well adapted towards evolving labour markets. The university's societal impact is well recognized as many managers and lecturers have advisory roles in companies, ministries and international associations, and the outreach from teaching and research towards society is common. The involvement of external stakeholders is very important and EMÜ is doing a good job. However the impact of the labour market should be kept in balance with the educational mission/mandate of a HEI (also in the future).

Research generally informs teaching. Lecturers commonly use the latest research results in their classes and MSc (and BSc) thesis students contribute to research projects.

The university leadership and institute management considers the thematic differences and promote the overarching mission of the EMÜ. Advancing a bioeconomy is central to this mission.

A strategic long-term vision to further develop the university's domain exist. Both the vision and mission focus on the bioeconomy as the overarching integrating theme bioeconomy. Bioeconomy, however, is too broadly defined and not understood in similar ways by all lecturers, researchers and managers. This limits its integrating potential. The EU White Paper (2017) on "The European Bioeconomy in 2030" defined as the sustainable production and conversion of biomass into a range of food, health, fibre and industrial products, and energy. This is indeed very relevant for groups that relate to production aspects but less to groups that cover design (e.g. landscape architecture or conservation). Broadening the theme to circular economy (another major EU theme), green economy (a major UN Environmental Programme theme) or the UN Sustainable Development Goals (SDGs) would both increase its relevance as an integrating theme for the whole university and create larger impacts on society. These broader themes also cater for the future until the midst of this century. Such broadening could also create opportunities for innovative MSc and PhD thesis topics and collaborations across institutes that open new grounds and initiate new knowledge domains.

The university and its institutes are well aware that good strategic plans are needed to keep student numbers to acceptable levels as indicated in the performance agreement with the Ministry of Education. If the education quality and relevance declines, students will move away. There are ample possibilities to collaborate across programmes and make the study programmes more attractive. For example, focussing on sustainability (SDGs) and renewable energy, and veterinary and food sciences could enhance attractiveness of curricula.

### Commendations

- Common research, development and/or other creative activities are developed at EMÜ and contribute to the university's academic esteem and impacts to society.
- The current mission, vision and development plan are developed by and accepted by all institutes, and are used to inform teaching and research.

### Recommendation

- The current understanding and implementation of the bioeconomy theme could be more encompassing to include elements of a circular or green economy and directly relevant to SDGs to create greater opportunities for collaboration within and outside the university.

## 12. Service to society

### Standard:

The higher education institution initiates and implements development activities, which enhance prosperity in the community and disseminate recent know-how in the areas of the institution's competence. The higher education institution, as a learning-oriented organisation, promotes lifelong learning in society and creates high-quality opportunities for that.

### Guidelines:

*The HEI contributes to the development of the community's well-being by sharing its resources (library, museums, sports facilities, etc.), by providing consulting and advisory services, and by organising concerts, exhibitions, shows, conferences, fairs and other events.*

*The HEI involves alumni in activities aimed at the development of the HEI and the knowledge society.*

*Employees of the HEI participate in the work of professional associations and in other community councils and decision-making bodies as experts, directing society's development processes as opinion leaders. The impact academic employees have on society is taken into account when evaluating their work.*

*The HEI has defined the objectives for in-service training and measures their implementation. In-service training is planned in accordance with the needs of target groups.*

### Indicators:

- *Number of people in continuing training (and other privately financed open forms of study), number of lessons or ECTS per participant*

conforms to requirements	partially conforms to requirements	does not conform to requirements	worthy of recognition
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Evidence and Analysis

Next to their regular knowledge-production of research, development and higher education, EMÜ can document a wide range of activities as service to society: University of Families, Sports Club and joint activities between the university and schools on primary and secondary level. Museums and research centres are open to public. The same is true for the university's public spaces that are accessible for society (e.g. green areas).

Society's needs for constantly developing their knowledge is taken well care of through lifelong learning, courses that are set up and administrated by the Open University (AÜ). These courses cover all EMÜ fields of competence and are also offered to a wider public than EMÜ's own graduates. This includes courses that are offered to everyone of society from school students to professional development for employees. According to the SAR, the activities regarding lifelong learning are assessed once a year at the annual joint development seminar. EMÜ collects and analyses the data of participant numbers, their feedback regarding the lifelong learning courses and from the needs of

target groups. This data results in objectives in the development plans including defining the corresponding activities, indicators and target levels (e.g. Development Plan 2016 – 2015).

The Figure 3.12.1 in the SAR, informs that in 2017 the university organized 140 courses that attracted more than 2400 participants. We were informed that the courses could last from 8 up to 40 academic hours. The panel would have liked to see a more detailed graph on which type of courses. However, the university did not have that at hand. This could certainly be an issue for the university for a better reflection on society's needs and also where and how to develop and market other university activities.

Next to all these activities mentioned above, EMÜ also disseminate their know-how to targeted groups directly through research centres and museums. We noticed with interest also the event "Researchers' Night". Last, but not least: EMÜ is proud of their alumni-contacts.

One aspect of service to society is also that employees are encouraged to participate in the work of professional associations, in other community councils and decision-making bodies. At EMÜ employees of the university should be further encouraged to participate in these associations and boards as experts. In this regard, EMÜ should continue and consider enhancing to value the impact the academic staff performs for the society in addition to their research activities.

EMÜ also develops their webpages for these purposes of service to society. Moreover, EMÜ uses channels such as interviews for the media e.g. in newspapers, on the radio and on TV for dissimulation.

We will support the university in their reflections on promoting wider publicity for EMÜ as the university having the mission of bioeconomy. In this regard, we will suggest that the university strengthens its holistic, interdisciplinary approach as an exchange platform with the society.

### Commendation

- EMÜ facilitates many and varied measures to serve society and disseminate their knowledge in a fruitful way. They are also insistent in developing these activities further.

### Recommendations

- The panel recommends EMÜ to explore how to engage Alumni more in informing about prospective job perspectives to potential students as well as graduates.
- The panel recommends EMÜ to create more detailed analyses and documentation of continuing education courses that they offer in order to better reflect on society's needs and also where and how to develop and market other university's activities.

## 2. Assessment findings of the sample of the study programmes

### 2.1. Study Programme of Forestry (BSc)

**General information:** EMÜ is the only university in Estonia to provide a higher-education forestry (BSc) programme. As noted in the SAR (Section 4.1 Forestry, BSc) investments for renovation of classrooms and updating teaching devices have been made since 2013. The Institute of Forestry and Rural Engineering (IFRE) is the structural unit responsible for conducting the Forestry study programme.

<i>Information about the Forestry BSc programme</i>	
<b>Study programme group</b>	<i>Agriculture, Forestry and Fishery</i>
<b>Level of studies</b>	<i>Bachelor's level</i>
<b>Year of first admissions to the curriculum</b>	<i>2002</i>
<b>Duration of studies, number of credits</b>	<i>180 ECTS (3 years)</i>
<b>Curriculum specialisation</b>	<i>Forest management</i>
	<i>Forest industry</i>
<b>Language of tuition</b>	<i>Estonian</i>
<b>Degree to be awarded</b>	<i>Bachelor of Science in Agriculture (BSc)</i>
<b>Curriculum structure</b>	<ul style="list-style-type: none"> <li>• General module 40 ECTS</li> <li>• Speciality module 103 ECTS</li> <li>• Specialisation module: Forest Industry 14 ECTS or Forest Management 13 ECTS</li> <li>• Elective subjects module: in specialisation on Forest Industry 5 ECTS in specialisation on Forest Management 6 ECTS</li> <li>• Optional subjects 8 ECTS</li> <li>• Bachelor's thesis 10 ECTS</li> </ul>
<b>Structural unit responsible for the curriculum</b>	<i>Institute of Forestry and Rural Engineering (IFRE)</i>

Statistical data about students on Forestry BSc curriculum (401)

Academic year	Admission	Graduates	Dropout cases	Dropout during the first year of studies	Total number of students as of 01.01.18	Outgoing mobility
2017/2018	32	24	31	13	145	3
2016/2017	43	22	33	11	166	2
2015/2016	68	38	56	17	209	4
2014/2015	57	26	50	20	211	1
2013/2014	68	35	74	21	255	1
2012/2013	75	38	45	12	262	3
2011/2012	92	36	64	16	264	1

### 2.1.1. Planning and management of studies

- The design and development of study programme(s) take into account the expectations of students and other stakeholders, national strategies, legislation and trends in the particular area as well as labour market needs. The level and volume of RDC activities is sufficient and supports the launching of the study programme(s).
- The objectives of study programme(s), modules (including courses) and their learning outcomes are concrete and coherent. The teaching content and methods and assessment criteria and methods support students in achieving their learning outcomes and developing their key competencies. The study programmes support the development of creativity and entrepreneurship and other general competencies.
- The administration of material and financial resources that ensure the design and implementation of the study programme(s) is purposeful, systematic and sustainable. The learning environment, including materials, tools and technology support the students in achieving their learning outcomes.

#### Evidence and Analysis

The design, development and revision to the Forestry programme (BSc) considers the expectations of students, alumni and private and public sector stakeholders as evidenced during oral testimonies. The coherence of subjects in the Forestry programme is assessed by the curriculum committee comprised of the two forestry-related Chairs of IFRE, forestry students or recent graduates and employers' representatives. External partners are engaged, but not systematically involved, in developing or implementing study programmes (SAR – Section 4.1).

The Forestry programme curriculum has been revised to reflect the needs of the labour market and has started to incorporate EMÜ's strategic goals (SAR – p. 83). The curriculum has been reorganized to increase coherent and logical connections between courses. For instance, the revised curriculum will introduce a speciality course on forest biodiversity and a special ecology course within the bio-economy sub-module as mentioned in the SAR. However, curricular revisions with stakeholders are probably only focused on three specific courses: Private forestry in Estonia; Management of state forests in Estonia; and Introduction to Estonian forest and timber industry (SAR – p. 89). Teaching faculty praised the freedom to re-structure existing and develop new courses. Adequate documentation of Forestry courses was an issue in the last review and has been improved. The objectives of Forestry courses and their learning outcomes are concrete and comprehensive.

The Forestry programme is in a position of strength to respond to changes in national strategies, legislation, trends in the forest industry and labour market needs, but only if the teaching faculty maintains the programme's numerous stakeholders actively and continuously engaged. A monitoring system to follow graduates' employment and development could provide insights in job-market development and identify needs to engage graduates in future curricular revisions.

The faculty is promptly transferring new knowledge from R&D to the classroom. As noted in the SAR (p. 80) and during oral testimonies, some BSc students are involved in R&D projects and gaining their first experiences in applied research. However, students' involvement in R&D projects could be more consistent and better planned (SAR – p. 87). Closer cooperation with other institutions and disciplines

across EMÜ could support greater interdisciplinarity, particularly in regard to the University's bio-economy strategy and entrepreneurship objectives.

It is worth noting that during oral testimonies faculty members and external stakeholders mentioned the value of facilities off-campus utilized by the Forestry programme for teaching purposes, which were not explicitly mentioned in the SAR. As noted in the booklet *'From Scientist to Producer'* plenty of opportunities to support entrepreneurs exist and seem to be already ongoing such as services to Estonian entrepreneurs and the public sector in the detection of forest pathogens, testing of timber products and dissemination of forest mechanization techniques.

### Commendations

- The curriculum was reorganized to increase the coherence and logical connections between the courses.
- External stakeholders, graduates and current students (particularly through student associations) are engaged in the planning and management of the Forestry programme.
- The program effectively imparts key competencies to succeed in the Forestry profession.
- The Forestry faculty promptly transfers new knowledge from R&D to the classroom.

### Recommendations

- Internal and external stakeholders should engage in a comprehensive effort to market the strengths of the Forestry programme to increase student enrolment.
- The bio-economy theme offers an opportunity to faculty and students of the Forestry programme, to add additional value to their programme and enhance entrepreneurial opportunities. Cooperation with other institutions and disciplines could provide added value to interdisciplinarity especially in the regard to the bio-economy strategy and entrepreneurship.
- A monitoring system to follow graduates' employment and development could support continued insights in job-market development and identify needs to engage in future curricular revisions.



## 2.1.2. Learning, teaching and assessment

- Conditions and organisation of admission ensure fair access to education and motivated student body. Students' choice of specialisation is supported.
- A student-centred approach is used in the studies, aiming at the students to assume responsibility for planning their studies and career and supporting the development of key competencies and achieving the learning outcomes of the study programme.
- Student assessment, including taking accreditation of prior and experiential learning into account, supports the students and corresponds to the learning outcomes. Objective and reliable assessment is ensured.
- The organisation of studies including practical work and training is based on the specificities of students and forms of study and supports the student in achieving the learning outcomes. Opportunities have been established for mobility within Estonia and internationally.
- Support services for students are in place and available for students. Individual development and progress of students are monitored and supported.
- Graduates of the study programme are competitive in terms of their knowledge and social skills both nationally and internationally.

### Evidence and Analysis

Admission criteria into the programme are clear and accessible to prospective students, which stem from a family tradition in the Estonian forest sector. However, the oral testimonies mentioned that these criteria are likely less clear to those without a background in Forestry or from outside Estonia. Admission information, which is available online at <https://www.emu.ee/en/admissions>, does not always provide full details in English for prospective foreign forestry students (SAR – p. 84). The admission criteria should be made available to all prospective students so that they are prepared for the programme's expected requirements and demands. The admission criteria could be adjusted and/or mandatory introductory courses could be used to satiate knowledge gaps and create a group of prospective students that is ready and prepared for the programme's requirements and demands.

Distinct specializations in forest management and forest industry allow a degree of flexibility to students' interest in forest resources at land resource or along the supply chain. The forest management specialization is probably more developed and better structured (e.g. 'Forest certification' vs. 'Forest soils') than the specialization in the forest industry that mainly includes general topics (e.g. 'Engineering graphics I' and 'Further mathematics for technical specialities').

Teaching and assessment methods are diverse ranging from traditional examinations, assignments, coursework and group projects, and support students in achieving their learning outcomes as reported in the SAR and as evidenced from a sample of syllabi provided during the accreditation panel's on-site visit. However, key professional competencies and how each of them will be assessed over the course of the module could be more clearly stated in syllabi. Teaching generic soft skills, such as communication and social skills (e.g. critical thinking and self-reflexion) to educate responsible citizens, should be strengthened in the curriculum.

Procedures for periodic evaluations of the learning environment have not been fully established yet. Student feedback and staff suggestions are to be delivered to the administration (SAR – p. 83). During oral testimonies with students some of them were not aware of how the teaching faculty actively

addressed their concerns and considered their recommendations during course development and revisions. Students more closely engaged with the forestry-student association seemed better informed about how the staff with the Forestry programme addresses their concerns and incorporates their feedback as noted during oral testimonies. In this regard, the formal feedback system should provide a closed feedback process, so students are informed, aware of the value of their feedback and the consequent changes in, for example, a focus-group discussion.

Also the information of students about RLP procedures should be improved to decrease the barriers for students to, for example, go abroad or choose individual learning pathways.

Total number of students enrolled in the Forestry programme is 145 as of 1 January 2018 (Academic year 2017-18). This is a significant decline from 211 students in academic year 2014-15 and 264 in academic year 2011-12. The number of students dropping out from the programme is pervasive, even exceeding the number of graduates (SAR – Table 4.1.2). During oral testimonies the accreditation panel identified an opportunity to engage all stakeholders within the EMÜ campus and beyond in a comprehensive effort to market the strengths of the Forestry programme to increase student enrolment and evaluate reasons for large number of drop-outs. Such marketing strategies should go beyond presenting learning outcomes on the website and better inform students about their prospects after completing the programme. This could also be a preventive action to avoid further drop outs.

Forestry graduates are competitive in terms of their professional knowledge and competencies nationally and internationally, based on oral testimonies. Students and graduates mentioned the 'hands-on' learning approach of the Forestry programme as a major strength. Further evidence of quality in learning was found in the number of students who seek to pursue post-graduate degrees at EMÜ and abroad. The programme is flexible to accommodate non-traditional students coming from vocational schools and meeting the needs of students engaged in part-time employment.

The Forestry programme supports the development of creativity and entrepreneurship and other general competencies of enrolled students through their participation in internships and the preparation of BSc theses.

### Commendations

- External stakeholders, graduates and current students, all recognize and value the new knowledge and practical skills learned during the study programme.
- The Forestry programme is flexible trying to meet the needs of different students, including those engaged in part-time employment.
- Forestry graduates are well prepared to continue advanced post-graduate studies in Estonia and abroad.

### Recommendations

- Admission criteria should be made clearly available to all prospective students.
- Students should be better informed about RLP procedures.

- Students should be better informed and aware of how their feedback contributes to improvements in teaching and learning.
- The number of students dropping out from the programme is pervasive, even exceeding the number of graduates. Internal and external stakeholders should evaluate reasons for large number of students dropping-out and engage in pre-emptive actions to ameliorate with this trend.
- Key professional competencies and how each of them will be assessed over the course of the module could be more clearly stated in syllabi. Teaching generic soft skills, such as communication and social skills (e.g. critical thinking and self-reflexion) to educate responsible citizens, should be strengthened in the curriculum.

### 2.1.3. Development, cooperation and internationalisation of teaching staff

- Teaching is conducted by a sufficient number of professionally competent members of the teaching staff who support the development of the students.
- Teaching staff follows the principles of academic ethics and the codes of conduct in case of non-compliance.
- Members of the teaching staff participate in international mobility programmes which encourage the development of their teaching and RDC activities and the cultural openness of the HEI and the Estonian society.
- The effectiveness of both studies and RDC activities, students' feedback, the effectiveness of supervision, development of teaching and supervision skills, international mobility and entrepreneurial or work experience in the specific field outside the HEI is taken into consideration in evaluating the work of the member of the staff.

#### Evidence and Analysis

Teaching is conducted by a sufficient number of professionally competent members of teaching staff, who support the development of the students. As mentioned in the SAR (p. 90), teaching skills of some lecturers could be improved and the Institute of Forestry and Rural Engineering is reportedly working on strengthening of apparent deficiencies.

SAR notes the lack of a systematic approach to improve teaching skills among staff members, as it largely depends on a particular person's time availability, willingness and interest to participate in development activities (page 90). Moreover, during oral testimonies the evaluation team identified opportunities to include more English in course contents and to develop lecturers' English skills to support greater programme internationalization. Although, EMÜ regularly offers in-house English courses for teachers, the university could develop a better strategy to incentivise teachers' participation in these language courses. EMÜ could develop more concrete strategies on how to include more English in the courses.

Teaching staff are encouraged to participate in international mobility programmes. However, as emphasized in the SAR (p. 90) a demanding workload for the teaching staff – coupled with

requirements to publish – limit the time available for developing new skills and teaching methods. The staff mobility is facilitated through the Institute of Forestry and Rural Engineering's membership in organizations such as the Network of European Forestry Faculties (SILVA) and Erasmus Forestry Network. Forestry students are engaged and actively involved in activities of the International Forestry Students' Association (IFSA). The teaching staff is widely engaged in COST networks and other international projects (SAR – p. 89), but participation in mobility programmes for teaching at other universities is low (page 90).

Students' feedback points to the need to improve some subjects (SAR – p. 90). Based on oral testimony, Chair holders consider effectiveness in teaching, student feedbacks, international mobility and evidence of performance during annual evaluations. When issues regarding ineffective teaching are raised in student evaluations, each Chair holder meets with the corresponding member of staff and tries to gain a better understanding of the issues at stake. This level of qualitative assessment complements conventional student evaluations. A Chair may offer opportunities for teaching development and ways to address students' concerns. All teaching staff are offered opportunities to participate in self-development courses. Peer-to-peer learning of innovative teaching happens through optional campus-level training and in less formal settings - as mentioned by a faculty member 'the coffee room is the best platform to learn about new teaching techniques'. Teaching staff should further implement novel and innovative teaching and assessment methods and should be encouraged to be trained pedagogically. Also better English language skills should be promoted among teachers. In the future, EMÜ could develop a strategy to incentivise teachers' participation in pedagogical courses.

With regard to internationalisation, the study programme could improve strategic cooperation with collaborative agreements to create more international opportunities and make them more accessible for students.

### Commendations

- Teaching is conducted by a sufficient number of professionally competent members of the teaching staff who support the development of the students;
- Chair professors take into consideration effectiveness in teaching, students' feedback, international mobility, among other criteria during teaching staff's annual evaluations; and
- The Institute of Forestry and Rural Engineering is actively engaged within European and international forestry networks.

### Recommendations

- The Institute of Forestry and Rural Engineering could improve strategic institutional cooperation to make internationalisation more accessible for all students and teaching staff.
- Teaching staff should further implement novel and innovative teaching and assessment methods and should be encouraged to be trained pedagogically. Also better English language skills should be promoted among teachers. In the future, EMÜ could develop a strategy to incentivise teachers' participation in pedagogical courses.

## 2.2. Study Programme of Landscape Architecture (MSc)

**General information:** Landscape architecture (LA) is only one active curriculum at master's level (MSc) at EMÜ in Estonia. EMÜ Two programmes run concurrently. The international programme taught in English, was opened in 2011 and has 9 students in total. The programme for Estonian students is partly shared with the course taught in English and in addition has a number of modules taught in Estonian. There are 53 student in total. The programmes are revised regularly to respond to European and international guidance on education in landscape architecture.

The programme is highly focused on international context (curriculum content, international teaching staff, international students). In 2018 the IT infrastructure was updated (TV screens, computers etc.). The Institute of Agricultural and Environmental Studies (IAES) is the structural unit responsible for conducting the MSc Landscape Architecture study programme.

<i>Information about the Landscape Architecture MSc programme</i>	
<b>Study programme group</b>	<i>Architecture and building</i>
<b>Level of studies</b>	<i>Master's level</i>
<b>Year of first admissions to the curriculum</b>	<i>2013</i>
<b>Duration of studies, number of credits</b>	<i>120 ECTS (2 years)</i>
<b>Curriculum specialisation</b>	<i>No specialisations</i>
<b>Language of tuition</b>	<i>English</i>
<b>Degree to be awarded</b>	<i>Master of Science in Engineering (MSc)</i>
<b>Curriculum structure</b>	<ul style="list-style-type: none"> <li>• <i>Speciality module 62 ECTS</i></li> <li>• <i>Elective subjects' module 20 ECTS</i></li> <li>• <i>Optional courses 8 ECTS</i></li> <li>• <i>Master's thesis 30 ECTS</i></li> </ul>
<b>Structural unit responsible for the curriculum</b>	<i>Institute of Agricultural and Environmental Studies (IAES), Chair of Landscape Architecture</i>

Statistical data about students on Landscape Architecture MSc curriculum (119359)

Academic year	Admission	Graduates	Dropout cases	Dropout during the first year of studies	Total number of students as of 01.01	Outgoing mobility
2017/2018	4	2	1	-	9	6
2016/2017	4	9	-	-	14	7
2015/2016	9	5	-	-	15	6
2014/2015	6	-	-	-	6	8
2013/2014	1	-	1	1	-	-

## 2.2.1. Planning and management of studies

- The design and development of study programme(s) take into account the expectations of students and other stakeholders, national strategies, legislation and trends in the particular area as well as labour market needs. The level and volume of RDC activities is sufficient and supports the launching of the study programme(s).
- The objectives of study programme(s), modules (including courses) and their learning outcomes are concrete and coherent. The teaching content and methods and assessment criteria and methods support students in achieving their learning outcomes and developing their key competencies. The study programmes support the development of creativity and entrepreneurship and other general competencies.
- The administration of material and financial resources that ensure the design and implementation of the study programme(s) is purposeful, systematic and sustainable. The learning environment, including materials, tools and technology support the students in achieving their learning outcomes.

### Evidence and Analysis

MSc Landscape Architecture (MSc LA) is a strong study programme with a good international reputation led by Professor Simon Bell. Structurally this is a coherent programme of learning outcomes and assessment criteria that clearly meet the expectations and requirements of the International Federation of Landscape Architects (IFLA), European educational standards and internationally through the IFLA/UNESCO Landscape Charter (self-evaluation report and student interviews). It was reported through the alumni meeting that there was a significant shortage of landscape architects within Estonia.

Generally alumni were satisfied with the knowledge and skills acquired from their study programmes and appreciated how well prepared they were for work in a wider context. They felt that most information was useful and, because of that, they felt well prepared for their jobs.

Many of the staff are active researchers and have successfully won significant international research grants (SAR).

Structures to support students are highly valued and well understood by students. Students are comfortable enough to be upfront and ask staff about any issues concerning them. Students were clearly aware of the system of complaints, initially dealing with any matters informally within the school, then escalating the issue to senior management. All groups mentioned the strong and supportive family atmosphere and appreciated their first contact person, either a person from the international department or the programme leader for Estonian students. The Erasmus coordination office and the counselling service were highlighted as being excellent. One student argued that course was not always satisfactory and that it needed to be more creative and freethinking and that international students needed greater support to embark on their careers.

The teaching team appreciated that landscape architecture offered a strong vehicle to interpret the strategic plan in a very creative and robust way to contribute to the integration and transformation of the Institute's culture and the development of the discipline (staff interviews) although it had not yet significantly affected the teaching programmes' culture.

### Commendations

- The highly successful research capacity of the school and the close integration of research and teaching.
- The supportive atmosphere of the school welcoming a great range of international students from around the world.

### Recommendations

- Ensure the number of courses and percentage of the study programmes taught either in Estonian or in English is made clear to all students prior to enrolment.
- Ensure the creative potential of the students is developed through the programme.
- Use the opportunities presented by the strategic plan in a creative way to contribute to the integration and transformation of the Institute's culture and the development of the discipline.

## 2.2.2. Learning, teaching and assessment

- Conditions and organisation of admission ensure fair access to education and motivated student body. Students' choice of specialisation is supported.
- A student-centred approach is used in the studies, aiming at the students to assume responsibility for planning their studies and career and supporting the development of key competencies and achieving the learning outcomes of the study programme.
- Student assessment, including taking accreditation of prior and experiential learning into account, supports the students and corresponds to the learning outcomes. Objective and reliable assessment is ensured.
- The organisation of studies including practical work and training is based on the specificities of students and forms of study and supports the student in achieving the learning outcomes. Opportunities have been established for mobility within Estonia and internationally.
- Support services for students are in place and available for students. Individual development and progress of students are monitored and supported.
- Graduates of the study programme are competitive in terms of their knowledge and social skills both nationally and internationally.

### Evidence and Analysis

Excellent connections between research and teaching exist and the programme adapts and is responsive to the research priorities of European funding organisations and staff interests, and, where suitable, involve students in its research through the selection of projects. This engagement is highly valued by the strongly supportive student population (interviews with 2 cohorts of students) although some voiced concern about a lack of variety in projects because all are related to water (most research topics relate to water).

The students very much enjoy working at a regional scale and internationally. Some mentioned that they wanted to undertake more design work (rather than report writing) and to learn how to design.



They had expected to do be taught more (technical) drawing. They highly valued the opportunity to follow optional studios and extra courses. Both cohorts felt as though they needed to be more critically challenged through the projects constructive criticism to motivate learning. Some students felt that their learning was not robust enough which limited the students' motivations to improve. The students highly valued the opportunities they have for options and to take additional courses.

Oral testimonies from the students and staff describe a school operating highly effectively as a unit "like a big family". The teachers we acutely aware of the need for a personal approach given the wide range of cultural backgrounds (teachers panel) and are well supported by advisory services (psychologist, mentoring, international department) and if needed individual counselling.

Teachers use a well-developed student centred approach, evidenced by the appropriate learning outcomes. A wide range of teaching and learning methods are used and highly valued, including study tours, visits, group work, individual projects, lectures and tutorials. Teachers depend largely on evidence-based research with students learning to think creatively to apply this knowledge during discussions, seminars, tutorials and one to one talks. Usually, lectures takes 50/50 teaching theory and studio projects (teachers panel).

Issues were raised on the extent of group work, the assessment of an individual's contribution to group work and an unequal distribution of group work in Year 1. Students are required to discuss ethical issues to cite other studies properly, but not as part of their project work. Some students identified problems gaining adequate feedback from externally taught courses. The lack of motivation of some students was identified several times as disruptive and as having a negative effect on the student cohort. Some of those not paying fees are appear to be less committed to the study programme.

Although two courses are offered both in English and Estonian, it is effectively one course. This causes problems for Estonians and it should be made clear that the course delivery is primarily in English.

### Commendations

- The range and scope of teaching methods, the value placed by students on being active researchers with the staff and the great supportive atmosphere created in the school.
- Student-centred approach to teaching and learning, which manifests itself as highly motivated and well-trained Landscape Architecture students.

### Recommendations

- Assessment methods for group work should be clarified.
- Address the motivational and commitment issues raised that are created by having one group of students who pay fees and one group that does not.

## 2.2.3. Development, cooperation and internationalisation of teaching staff

- Teaching is conducted by a sufficient number of professionally competent members of the teaching staff who support the development of the students.

- Teaching staff follows the principles of academic ethics and the codes of conduct in case of non-compliance.
- Members of the teaching staff participate in international mobility programmes which encourage the development of their teaching and RDC activities and the cultural openness of the HEI and the Estonian society.
- The effectiveness of both studies and RDC activities, students' feedback, the effectiveness of supervision, development of teaching and supervision skills, international mobility and entrepreneurial or work experience in the specific field outside the HEI is taken into consideration in evaluating the work of the member of the staff.

## Evidence and Analysis

The study programme it is highly successful in terms of research and internationalisation in that many of the teachers and students are international. All teachers confirmed that they all had opportunities to travel abroad to develop their knowledge, expertise and skills, either through the Erasmus programmes, for the European projects and by contributing to the international organisations such as IFLA (Europe) and ECLAS.

The teachers confirmed that they were able to research and were involved in the current research projects. Some teachers require more useful development courses (e.g. in developing graphics). Students recognised that staff are under pressure from their work loads, their need to deliver major research projects and their teaching commitments, but students enjoy participating in research and appreciate being able to contribute to regional and international challenges through project work.

Concerns were raised over the inequalities in status, salaries and opportunity as an issue which may possibly be exacerbated by the new national legislation (teachers meeting). Some very experienced teachers who already play important leadership roles within the programme but who do not have PhDs and whose subject area may be unsuitable for PhD study, will be penalised in terms of career progression.

## Commendations

- A very successful international programme, well connected into the European and international Landscape Architecture organisations and responsive to international concerns.
- Capacity to take advantage of Continuing Professional Development and training opportunities at an internationally.
- The dedication and motivation of all members of staff.

## Recommendations

- Develop a proper succession policy, provide opportunities to promote younger colleagues to benefit from their enthusiasm and retain their expertise.
- Ensure that leading experts in landscape architecture are properly valued and remunerated even if they do not have and do not want to have, PhDs.

## 2.3. Study Programme of Production and Marketing of Agricultural Products (MSc)

**General information:** The aim of the MSc curriculum Production and Marketing of Agricultural products is to provide in-depth knowledge and skills in the production of field crops, their postharvest treatment and marketing. The curriculum was given a positive evaluation for seven years in 2017. The curriculum is interdisciplinary, which ensures better competence for graduates, and are directly related to ensuring the country's food security through practical. The Institute of Agricultural and Environmental Studies (IAES) is the structural unit responsible for conducting the Production and Marketing of Agricultural products study programme.

<i>Information about the Production and Marketing of Agricultural Products MSc programme</i>	
<b>Study programme group</b>	<i>Agriculture, Forestry and Fishery</i>
<b>Level of studies</b>	<i>Master's level</i>
<b>Year of first admissions to the curriculum</b>	<i>2002</i>
<b>Duration of studies, number of credits</b>	<i>120 ECTS (2 years)</i>
<b>Curriculum specialisation</b>	<i>No specialisations</i>
<b>Language of tuition</b>	<i>Estonian</i>
<b>Degree to be awarded</b>	<i>Master of Science in Agriculture (MSc)</i>
<b>Curriculum structure</b>	<ul style="list-style-type: none"> <li>• <i>specialty module 73 ECTS,</i></li> <li>• <i>specialty elective subjects 12 ECTS,</i></li> <li>• <i>optional subjects 5 ECTS,</i></li> <li>• <i>Master's thesis 30 ECTS</i></li> </ul>
<b>Structural unit responsible for the curriculum</b>	<i>Institute of Agricultural and Environmental Sciences (IAES)</i>

Statistical data about students on Production and Marketing of Agricultural Products MSc curriculum (463)

Academic year	Admission	Graduates	Dropout cases	Dropout during the first year of studies	Total number of students as of 01.01	Outgoing mobility
2017/2018	20	4	11	4	35	4
2016/2017	8	20	9	2	40	5
2015/2016	21	17	14	2	63	2
2014/2015	16	14	7	3	61	6
2013/2014	25	14	7	3	66	2
2012/2013	14	11	15	1	68	8
2011/2012	33	13	7	-	71	7

### 2.3.1. Planning and management of studies

- The design and development of study programme(s) take into account the expectations of students and other stakeholders, national strategies, legislation and trends in the particular area as well as labour market needs. The level and volume of RDC activities is sufficient and supports the launching of the study programme(s).
- The objectives of study programme(s), modules (including courses) and their learning outcomes are concrete and coherent. The teaching content and methods and assessment criteria and methods support students in achieving their learning outcomes and developing their key competencies. The study programmes support the development of creativity and entrepreneurship and other general competencies.
- The administration of material and financial resources that ensure the design and implementation of the study programme(s) is purposeful, systematic and sustainable. The learning environment, including materials, tools and technology support the students in achieving their learning outcomes.

#### Evidence and Analysis

EMÜ is unique HEI in Estonia offering science-based higher education in the fields of agriculture and food science (oral testimony by the DAA staff, teaching staff and students; SAR). The curriculums are planned to be in line with the Universities Act, the Standard of Higher Education, taking into account the results of study fields (OSKA system), national and international strategies, legislation and trends (e.g. OECD, FAO) and the Development plan of EMÜ for 2016–2025. EMÜ has ambition to become an internationally recognized university in the field of bio-economy (The Development plan).

The strategic aims for research, development and other creative activities conducted at internationally recognised level are set in the Development Plan. The panel revealed that the level and volume of RDC activities is sufficient and supports the developing of the study programmes (oral testimony by the Institute researchers, evidences gathered during the facilities tour).

The design and development of the curriculums at EMÜ is a continuous process harmonised with the expectations of the labour market and the transforming society, involving stakeholders, such as employers' representatives and professional associations, incorporating feedback from various external (experts, alumni) and internal (e.g. students feedback) verification activities (oral testimony by the DAA staff, teaching staff).

In general, the objectives of study programmes, modules, including courses and their learning outcomes are concrete and coherent. Although the panel suggests, that in the case of the study programme Production and Marketing of Agricultural products the coherence of the study programme objectives and learning outcomes has to be increased:

- in the way of extent, e.g., the learning outcomes of the subject “Marketing of Agricultural Products” comprise only 4 % from the total specialty module (3 credits out of 73 Credits);
- in the way of content, e.g., the objective of the Master’s thesis is “to provide acquisition of skills and knowledge needed for collection of data, specific scientific language, citation and analysing specific literature and comparing the experimental results and methods used” is not coherent with the programme’s objective “to provide the in-depth knowledge and skills in the field of production of field crops...” . Moreover, the MS thesis objective should be described from a student-centred perspective,

for instance, it should stress that through completion of a thesis students shall demonstrate their ability to independently conduct research within their field of expertise.

The panel noted, that the process of making changes in the curricula and study process is rather slow to reflect the changes in the society, e.g. curriculum's subjects' content in some cases are more national rather international, some literature sources has to be more updated in the light of fast EU research and innovation policies changes.

In most of the cases the teaching content, methods, assessment criteria and methods support students in achieving their learning outcomes and developing their key competencies. Teaching content seems interdisciplinary and closely related to research conducted at the institutes. Students are involved in research projects, including practical projects, providing them with topical graduation themes. In collaboration with enterprises, problem-based learning implemented. Students appreciate learning through the experience of practitioners as well (oral testimony by the students).

Although the panel noted that, in order to make student assessment more transparent, there is a need for an update in assessment methods to be more linked to and support the achievement of learning outcomes, including general competencies and the assessment criteria have to be more detailed described.

The study programmes support the development of creativity and entrepreneurship and other general competencies. One out of seven EMÜ values is creativity, and the university seeks to train people to start with their own company (SAR). The panel heard although, that the entrepreneurship competencies has a potential to be strengthen in curriculums, especially with the knowledge of economy (oral testimony by the students) and marketing (oral testimony by the alumni).

Significant emphasis is placed on monitoring and enhancing the quality of the study programme. Feedback from stakeholders, including students and employers is regularly sought and acted upon. The initiative to move to a cycle and distant learning options at MSc level in contract to the existing model which is stationary study is understandably taking time to become effectively embedded (SAR). However, it has been received positively by the students and teaching staff on the Production and Marketing of Agricultural products programme.

The panel noted that the administration of material and financial resources that ensure the design and implementation of the study programmes is purposeful and systematic. Although due to decrease in student numbers, the internal division of operational funding and basic funding of research in the responsibility areas needs to be revised and / or other new the project-based funding schemes for the research sustainability have to be introduced (oral testimony by the institute researchers during the tour).

The learning environment, including materials, tools and technology supports the students in achieving their learning outcomes. Main investments in buildings (2009-2013), information and communication technologies and classrooms (2013-2017) and that is strong motivation for teaching staff and students to carry on with the research activities within the study programmes.

The university does benchmark of the study programme. Benchmarking with appropriate partners, at a national or international level, enables the University to compare and evaluate its performance and, in so doing, monitor standards, compare good practice and make quality improvements. The curriculum has been compared to other curriculums at the University of Helsinki, Swedish University of Agricultural Sciences, and Wageningen UR.

### Commendations

- The development of the curriculums in the university is managed at several levels and representatives of both students and employers/entrepreneurs are involved in different decision-making bodies.
- Teaching is closely related to the research.

### Recommendations

- Review recruitment strategies in an attempt to widen the pool of prospective students and to stimulate existing students to fulfil their studies.
- Strengthen the curriculums with entrepreneurship as well as marketing knowledge.
- Some of curriculum's subjects' content and literature needs to be updated in order to be more international and reflect the fast EU research and innovation policies changes.
- There is a need for an update in assessment methods to be more linked to and support the achievement of learning outcomes, including general competencies. The assessment criteria have to be more detailed described in order to make student assessment more transparent.

## 2.3.2. Learning, teaching and assessment

- Conditions and organisation of admission ensure fair access to education and motivated student body. Students' choice of specialisation is supported.
- A student-centred approach is used in the studies, aiming at the students to assume responsibility for planning their studies and career and supporting the development of key competencies and achieving the learning outcomes of the study programme.
- Student assessment, including taking accreditation of prior and experiential learning into account, supports the students and corresponds to the learning outcomes. Objective and reliable assessment is ensured.
- The organisation of studies including practical work and training is based on the specificities of students and forms of study and supports the student in achieving the learning outcomes. Opportunities have been established for mobility within Estonia and internationally.
- Support services for students are in place and available for students. Individual development and progress of students are monitored and supported.
- Graduates of the study programme are competitive in terms of their knowledge and social skills both nationally and internationally.

### Evidence and Analysis

Conditions and organisation of admission ensure fair access to education and motivated student body. Students' choice of specialisation is supported. In admission to the MSc studies the graduates of agriculture-related specialties are admitted on the basis of their average grade on the diploma and

the grade for their BSc examination or BSc thesis (SAR – p. 95). The panel heard that agricultural studies are not always the applicants' first choice and therefore the university has difficulties to comply with the government's agreed number of students (oral testimony by the students). As a result, the admission level is often lower than preferred.

Due to flexible curriculum and small number of accepted students there is a possibility for each student to discuss their interest with the curriculum head to get guidance (advice on extra courses, research topic, etc.) (SAR – p. 96).

The panel was not provided with explicit examples where a student-centred approach to teaching and learning was employed. The panel noted that the content of learning outcomes needs improvement to reflect an appropriate MS-level education based on analysis, description and synthesis. The recommendation in section 2.3.1 regarding MS thesis learning outcomes offers an example of how a student-centred approach could be instil skills that should be developed by students enrolled in a MS degree.

The modules and subjects end with either a credit test, essay, practical or examination. The panel heard in the interviews that formulation of assessment methods and criteria is a team effort that includes syllabus responsible lecturer and faculty members. The Department of Academic Affairs is responsible for confirming the uniformity of assessment methods and criteria with the learning outcomes (SAR; oral testimony by teaching staff). The panel revealed that the assessment methods in most of the subjects are not linked to and do not support the achievement of learning outcomes, including general competencies, and assessment criteria are lacking clear descriptions (SAR; oral testimony by teaching staff).

In most of the cases the teaching content, methods, assessment criteria and methods support students in achieving their learning outcomes and developing their key competencies. Teaching content seems interdisciplinary and closely related to research conducted at the institutes. Students are involved in research projects, including practical projects, providing them with topical graduation themes. In collaboration with enterprises, problem-based learning implemented. Students appreciate learning through the experience of practitioners as well (oral testimony by the students).

EMÜ has implemented a number of measures to make the feedback from the study information system (ÕIS) more effective and relevant. Although the panel heard that solving the problems related to asking for feedback on teaching and learning is a very complicated task, but EMÜ is continuously working on its development and making it more constructive. New system - feedback should become more student-centered, in which the student evaluates subjects and the learning process through self-analysis is planned to be introduced in 2019 (SAR; oral testimony by the DAA staff).

## Recommendations

- In order to make student assessment more transparent there is a need for update in assessment methods to be more linked to and support the achievement of learning outcomes, including general competencies, and assessment criteria have to be more detailed described.
- The content of learning outcomes need improvement to reflect an appropriate level of Master's studies.



### 2.3.3. Development, cooperation and internationalisation of teaching staff

- Teaching is conducted by a sufficient number of professionally competent members of the teaching staff who support the development of the students.
- Teaching staff follows the principles of academic ethics and the codes of conduct in case of non-compliance.
- Members of the teaching staff participate in international mobility programs which encourage the development of their teaching and RDC activities and the cultural openness of the HEI and the Estonian society.
- The effectiveness of both studies and RDC activities, students' feedback, the effectiveness of supervision, development of teaching and supervision skills, international mobility and entrepreneurial or work experience in the specific field outside the HEI is taken into consideration in evaluating the work of the member of the staff.

#### Evidence and Analysis

EMÜ has defined long-term goals (Strategic areas and goals and objectives for 2025) and objectives necessary for achieving them in five strategic areas, and one of them is Members of EMÜ community where the target for Advanced, motivated and united members of EMÜ community is set (SAR).

There are 19 lecturers currently attached to the programme Production and Marketing of Agricultural Products, MSc. Section 4 of programme's SAR highlights that 5 of the staff are professors and 4 associate professors (in 2018). The panel found that the number of lecturers with a PhD degree is increasing. 79 % of the staff in the programme are having PhD and 21% MSc degree. This is in close line to the EMÜ Development Plan (all lecturers should have a PhD degree in 2020); however, the goals set in the DP seem to be too ambitions considering the set timeframe for achieving it.

Staff were aware of the importance of academic ethics; however, awareness on issues of academic ethics by teaching staff is low and mostly involves understanding and implementing of academic fraud and plagiarism (SAR; oral testimony by the staff members). The panel heard that issues of inequality are not taken seriously and the process could be improved in EMÜ academic community (oral testimony by the students' representatives) even though various normative documents have been established to ensure equal treatment.

Lecturers from three institutes — the Institute of Agricultural and Environmental Sciences, Institute of Economics and Social Sciences and Institute of Veterinary Medicine and Animal Sciences – are involved in teaching in the curriculum. Approx. 40 PhD students are actively involved in teaching, usually starting as seminar or lab assistants. The panel heard that the teaching staff is actively engaged in research and the scientific skills and knowledge is being used in the lectures (Oral testimony by the students' representatives).

Staff from the Production and Marketing of agricultural products, MSc programme provided examples of engagement with international mobility programmes and of international scholarly activity. This included participation in the FACES, and ERASMUS+ project EduSapMan grant projects with the aim of improving specialisation skills and knowledge (SAR). The panel revealed the regular and invited foreign professors from Sweden and Latvia are involved in teaching for the Programme and more plans for this via ERASMUS+ASTRA bioeconomy programme (oral testimony by the teachers). On the

other hand, even though that EMÜ is encouraging the academic staff to teach more courses in English and has also provided financial support for developing new courses and modules, the amount of English language module in the programme is still low. This impairs the other internationalisation criteria - the number of incoming and outbound mobility students for the programme is rather low

### Commendations

- The lecturers are the experts on their field.
- PhD students are involved as assistant lecturers.

### Recommendations

- Ensure that all staff are aware of the Academy's policy for adhering to academic ethics and that this is consistently implemented.
- Introduce more modules in foreign language for the programme.

## Appendix 1: Schedule of the visit to the Estonian University of Life Sciences

### Institutional Accreditation Estonian University of Life Sciences (EMÜ)

#### SCHEDULE OF THE VISIT 14 – 18 April 2019

SUNDAY, APRIL 14 Venue: Hotel L'Ermitage			
<b>Introductory and panel meeting at Hotel L'Ermitage</b>			
10.00 – 13.00 Orientation seminar			
<ul style="list-style-type: none"> <li>a) Estonian (higher) education system</li> <li>b) Quality assurance in higher education and research</li> <li>c) Guidelines and procedures of institutional accreditation               <ul style="list-style-type: none"> <li>a. Assessment components</li> <li>b. Interviewing techniques</li> <li>c. Writing assessment report</li> <li>d. Decision-making</li> <li>e. Deadlines</li> </ul> </li> </ul>			
13.00 – 14.00 Lunch			
14.00 – 17.00 Preparation for the visit: strategy for interviews, final formulation and division of questions, etc.			
17.00 Bus to Tartu, accommodation at <a href="#">Hotel Tartu</a>			
MONDAY, APRIL 15 Venue: Estonian University of Life Sciences, Tartu			
Time	Activity	Experts/ room number	Representatives of the University
9.30 – 9.45	Introductory meeting with <b>self-evaluation team</b>	All Main building 211	Rector Vice-Rector for Research Vice-Rector for Academic Affairs EMÜ evaluation coordinator
9.45 – 10.45	Meeting with <b>Rector</b> <i>Topics: Current position of the University, plans for the future development, general and financial management...</i>	All 211	Rector
10.45 –	Break	Main Building	12 people

11.00		104	
11.00 – 12.15	Meeting with <b>Vice-Rector of Academic Affairs, Department of Academic Affairs....</b> <i>Topics: Management of studies, teaching and learning....</i>	All Main building 104	Vice-Rector for Academic Affairs Head of Dept of Academic Affairs Chief Specialist of International Relations Chief Specialist of Doctoral Studies Chief Specialist of Organisation of Studies (admission)
12.15 – 13.15	<b>Lunch</b>	University cafe, main building	
13.15 – 14.30	<b>Vice-Rector for Research, Department of Research and Development, Centre for Science Studies....</b> <i>Topics: Research and development activities, innovation, etc.</i>	All Main building 104	Vice-Rector for Research Head of Dept of RDC Senior Research Fellow, Chief Specialist of Dept of RDC Centre of Renewable Energy, Acting Head Research Centre of Organic Farming, Head Development Center of Bioeconomy, Head
14.30 – 14.45	<i>Break</i>	Room 104	
14.45 – 15.45	Meeting with external stakeholders of the University (incl. 3 curricula to be evaluated)	All Main Building, room 104	Head of Timber Marketing Department, State Forest Management Centre Executive Director, Estonian Forest and Wood Industries Association Forestry Consultant, Chairman of the Management Board, Rakvere Private Forest Owners Association  Baltic Agro Chartered landscape architect ( level 7), AS Kobras
15.45 – 17.15	Tour of the facilities	All, the commission is divided	Study Information System, Library Director of Collection Development Director of Library Development  Laboratory of Plant Physiology and Crop Sciences Soil Laboratories and Soil Museum Electron Microscopy Entomological collection Plant Health Laboratory Forest pathology
17.15 - ...	<i>Panel meeting; inquiry of documents requested from the University</i>	All	

<b>TUESDAY, APRIL 16</b> Venue: Estonian University of Life Sciences, Tartu			
<b>Time</b>	<b>Activity</b>	<b>Experts</b>	<b>Representatives of the University</b>
9.30 – 10.45	Meeting with the <b>Directors of Institutes and Colleges</b> <i>Topics: Study programme development, teaching and learning processes, quality and personnel management, research, development and innovation...</i>	All Main Building 104	Director of Institute of Agriculture & Environmental Sciences Deputy Director Science of Institute of Veterinary Medicine & Animal Sciences Director of Institute of Technology Director of Institute of Economics & Social Sciences Director of Institute of Forestry & Rural Engineering Director of Academic Affairs, Institute of Agriculture & Environmental Sciences Director of Academic Affairs, Institute of Forestry & Rural Engineering
10.45 – 11.00	Break	Main Building 104	
11.00 – 12.15	Meeting with representatives of <b>different support structures</b> <i>Topics: Library (resources), personnel management, communication management and marketing, infrastructure incl. ICT development and services, etc.</i>	All Main Building, 104	Director of Library Development Personnel Manager Chief Specialist of Personnel Dept Acting Manager of Marketing and Communications Dept Head of Office of Estates Chief Specialist of Finances Head of Dept of ICT
12.15 – 13.30	Lunch	University cafe, Main Building	
13.30 – 14.45 <i>Parallel interviews</i>	Meeting with <b>study programme manager and developers: Landscape Architecture</b>	Kathryn, Laima Main Building, library	Chair Professor of Landscape Architecture lecturer, Landscape Architecture junior researcher, Landscape Architecture junior researcher, Landscape Architecture
	Meeting with <b>study programme manager and developers: Forestry</b>	Francisco, Rik, Liv Main building, 104	professor professor associate professor Production and Financial Controller, State Forest Management Centre Independent Forestry Consultant and Member of the Saarde Parish Council

			associate professor
	Meeting with <b>study programme manager and developers: Production and Marketing of Agricultural Products</b>	Alvija, Tove Main building, 211	associate prof, Head of the Study Programme professor professor director of academic affairs, institute of Vet. Medicine and Animal Sciences professor
14.45 – 15.00	Break	Main Building 104	
15.00 – 16.00 <i>Parallel interviews</i>	Meeting with the <b>teaching staff : Landscape Architecture</b>	Kathryn, Laima Main Building, library	lecturer, Landscape Architecture lecturer, Landscape Architecture guest lecturer, Landscape Architect junior researcher, Landscape Architecture junior researcher, Landscape Architecture junior researcher, Landscape Architecture
	Meeting with the <b>teaching staff : Forestry</b>	Francisco, Rik, Liv 104	professor associate professor associate professor researcher researcher researcher
	Meeting with the <b>teaching staff: Production and Marketing of Agricultural Products</b>	Alvija, Tove Main building, 211	associate professor associate professor associate professor researcher associate professor senior researcher lecturer
16.00 – 16.15	Break	Main Building 104	
16.15 – 17.15	Meeting with <b>representatives of teaching staff: broader representation of teaching staff at the university</b>	All Main building, 104	chair professor chair professor researcher associate professor lecturer professor senior researcher associate professor
17.15 - ....	<i>Panel reflection, preparation for the next day, inquiry of documents</i>		

**WEDNESDAY, APRIL 17**

Venue: Estonian University of Life Sciences, Tartu

Time	Activity	Experts	Representatives of the University
9.30 – 10.30 <i>Parallel interviews</i>	Meeting with <b>students: Landscape Architecture</b>	Kathryn, Laima Main building library	1 <sup>st</sup> year master student 1 <sup>st</sup> year master student 1 <sup>st</sup> year master student 1 <sup>st</sup> year master student 1 <sup>st</sup> year master student 2 <sup>nd</sup> year master student 2 <sup>nd</sup> year master student 2 <sup>nd</sup> year master student
	Meeting with <b>students: Forestry</b>	Francisco, Rik, Liv Main building 104	3 <sup>rd</sup> year bachelor student 3 <sup>rd</sup> year bachelor student 3 <sup>rd</sup> year bachelor student 2 <sup>nd</sup> year bachelor student 2 <sup>nd</sup> year bachelor student 2 <sup>nd</sup> year bachelor student 1 <sup>st</sup> year bachelor student
	Meeting with <b>students: Production and Marketing of Agricultural Products</b> <i>management, communication management and marketing, infrastructure incl. ICT development and services, etc.</i>	Alvija, Tove Main building 211	2 <sup>nd</sup> year master student 2 <sup>nd</sup> year master student 2 <sup>nd</sup> year master student 1 <sup>st</sup> year master student 2 <sup>nd</sup> year master student 2 <sup>nd</sup> year master student
10.30 – 10.45	Break	Main Building 104	
10.45 – 11.45	Meeting with <b>students: broader representation of students at EMÜ</b>	All Main building 104	PhD student, Environmental Sciences and Plant Biology, 4 <sup>th</sup> year 1 <sup>st</sup> year master student, Nature Based Tourism 3 <sup>rd</sup> year PhD student, Forestry 2 <sup>nd</sup> year master student, Forest Management 3 <sup>rd</sup> year bachelor student, Landscape Architecture 3 <sup>rd</sup> year bachelor student, Nature Based Tourism 1 <sup>st</sup> year PhD student, Agricultural Sciences 2 <sup>nd</sup> year PhD student, Agricultural Sciences
11.45 – 12.00	Break	Main Building 104	
12.00 – 13.00	Meeting with <b>alumni of EMÜ</b>	All Main Building, 104	MSc Production and Marketing of Agric. Products, 2018 BSc Forestry, 2018 BSc Forestry, 2016; MSc Forest Industry, 2018 MSc Horticulture, 2016 MSc Landscape Architecture, 2018



			MSc Production and Marketing of Agricultural Products, 2016
13.00 – 13.45	<b>Lunch</b>	university cafe, Main Building	
13.45 – 15.45	<ul style="list-style-type: none"> <li>• <b>“open doors”</b> – opportunity for those from EMÜ who want to come to discuss various topics related to institutional accreditation with the experts (please register by sending e-mail: <a href="mailto:tiiu.bach@archimedes.ee">tiiu.bach@archimedes.ee</a> by April 16; time limit is 5 minutes per person)</li> <li>• <b>ad hoc interviews</b> (in case the panel considers it necessary to clarify some issues and talk once again to someone)</li> </ul>	All Main Building, 104	Open University Language Center, Head of the Center Lecturer, Language Center
15.45 – 16.15	Open meeting to staff and students: <b>presentation of preliminary conclusions by the panel</b>	All	All who participated in the interviews