CENTRE FOR QUALITY ASSESSMENT IN HIGHER EDUCATION

EVALUATION REPORT

STUDY FIELD of ENERGY ENGINEERING

at Vytautas Magnus University

Expert panel:

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2. **Prof. Dr. Luisa Fernanda Cabeza Fabra ,** *academic;*
3. **Prof. Dr. Eleonora Guseinovienė. ,** *academic;*
4. **Mr. Mindaugas Pranaitis ,** *representative of social partners;*
5. **Mr. Henrikas Vaickus,** *students' representative.*

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Study Field Data

Title of the study programme	***Sustainable Energy***
State code	6211EX030
Type of studies	University studies, master
Cycle of studies	Second
Mode of study and duration (in years)	Full-time (2)
Credit volume	120
Qualification degree and (or) professional qualification	Master of engineering
Language of instruction	Lithuanian, English
Minimum education required	Bachelor's degree
Registration date of the study programme	29 01 2007

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I. INTRODUCTION

1.1. BACKGROUND OF THE EVALUATION PROCESS

The evaluation of study fields is based on the Methodology of External Evaluation of Study Fields approved by the Director of the Centre for Quality Assessment in Higher Education (hereafter – SKVC) 31 December 2019 Order No. V-149.

The evaluation is intended to help higher education institutions to constantly improve their study process and to inform the public about the quality of studies.

The evaluation process consists of the main following stages: *1) self-evaluation and self-evaluation report prepared by Higher Education Institution (hereafter – HEI); 2) site visit of the expert panel to the higher education institution; 3) production of the external evaluation report (EER) by the expert panel and its publication; 4) follow-up activities.*

On the basis of this external evaluation report of the study field SKVC takes a decision to accredit study field either for 7 years or for 3 years. If the field evaluation is negative then the study field is not accredited.

The study field and cycle are **accredited for 7 years** if all evaluation areas are evaluated as exceptional (5 points), very good (4 points) or good (3 points).

The study field and cycle are **accredited for 3 years** if one of the evaluation areas was evaluated as satisfactory (2 points).

The study field and cycle are **not accredited** if at least one of evaluation areas was evaluated as unsatisfactory (1 point).

1.2. EXPERT PANEL

The expert panel was assigned according to the Experts Selection Procedure (hereinafter referred to as the Procedure) as approved by the Director of Centre for Quality Assessment in Higher Education on 31 December 2019 Order No. V-149. The site visit to the HEI was conducted by the panel on *30 April, 2021.*

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1.3. GENERAL INFORMATION

The documentation submitted by the HEI follows the outline recommended by SKVC. Along with the self-evaluation report and annexes, no additional documents were requested from the HEI before, during and/or after the site visit.

1.4. BACKGROUND OF THE STUDY FIELD/STUDY FIELD POSITION/STATUS AND SIGNIFICANCE IN THE HEI

General information about the significance of the study field

Energy Engineering is an important engineering field in Lithuania. The energy transition requires highly skilled engineers to meet the demands of the job market as well as undertaking research and development projects. The changing energy market is a result of the following:

1. Lithuania has a long-term national strategy for energy independence by 2050, when imported electricity will be replaced by domestically produced electricity.
2. In interim target for 2025 is to have the country's electricity network operating reliably in synchronous mode with the with the European electricity system.
3. Power generation will rely on renewable resources, with wind making up most of the electricity generated. The plan is to produce 50% of electricity from wind by 2030, with the rest shared between other resources, primarily solar power, biofuels and hydroelectric power.
4. The Government's strategic plan prepared by the Ministry of Energy highlights the need to promote sustainable, competitive and efficient development of the energy sector

Information about the role of the HEI

Vytautas Magnus University (VMU) was established in 1922 and re- established in 1989. It is a classical university based on the common beliefs and values of freedom, openness and dialogue, and orientated towards humanistic culture. The University provides degree studies of all three cycles – bachelor, master and PhD studies which cover a broad spectrum of fields ranging from humanities, social sciences and arts to the fundamental sciences, environmental sciences and biotechnologies.There are 15 academic divisions at VMU: Faculty of Arts, Faculty of Catholic Theology, Faculty of Economics and Management, Faculty of Humanities, Faculty of Informatics, Faculty of Law, Faculty of Natural Sciences, Faculty of Political Science and Diplomacy, Faculty of Social Sciences, Agriculture Academy, Education Academy, Music Academy, Innovative Studies Institute, Institute of Foreign Languages, Botanical Garden.

VMU started a second cycle Sustainable Energy programme in 1994. This has evolved over time to meet the changing market requirements. Collaboration with other universities and research institutions have shaped the programme to focus on research into renewable energy resources and conversion technologies. These changes have strengthened the research activity at VMU and increased the attractiveness of the programme.

II. GENERAL ASSESSMENT

Energy Engineering study field and second cycle at Vytautas Magnus University is given **positive** evaluation.

Study field and cycle assessment in points by evaluation areas

No.	Evaluation Area	Evaluation of an Area in points*
1.	Intended and achieved learning outcomes and curriculum	4
2.	Links between science (art) and studies	4
3.	Student admission and support	3
4.	Teaching and learning, student performance and graduate employment	4
5.	Teaching staff	4
6.	Learning facilities and resources	3
7.	Study quality management and public information	3
	Total:	25

*1 (unsatisfactory) - there are essential shortcomings that must be eliminated;
2 (satisfactory) - meets the established minimum requirements, needs improvement;
3 (good) - the field is being developed systematically, has distinctive features;
4 (very good) - the field is evaluated very well in the national and international context, without any deficiencies;
5 (excellent) - the field is exceptionally good in the national and international context/environment.

III. STUDY FIELD ANALYSIS

3.1. INTENDED AND ACHIEVED LEARNING OUTCOMES AND CURRICULUM

Study aims, outcomes and content shall be assessed in accordance with the following indicators:

3.1.1. Evaluation of the conformity of the aims and outcomes of the field and cycle study programmes to the needs of the society and/or the labour market (not applicable to HEIs operating in exile conditions)

(1) Factual situation

According to SER "the aim of the second cycle study program Sustainable Energy is to develop a new generation of specialists capable of analysing and evaluating energy resources, implementing renewable energy sources, developing and improving renewable energy technologies, analysing and reducing environmental pollution from energy systems, and continuing their studies in doctoral studies". The learning outcomes of the study program are formulated in order to properly prepare the graduate for professional activities. These include ability to define and critically evaluate energy exchange processes, energy use and savings. Analysing renewable energy resources and conversion technologies, formulating theoretical and experimental research and carry out assessment of energy resources and feasibly studies for implementation of renewable technologies. Other objectives include analysing specific publications and reports and working independently in a professional or scientific environment of energy engineering and effectively communicating work.

This is in line with societal needs as the country is undergoing a transition to become self-sufficient in power generation whole meeting international obligations for clean and sustainable energy system. It is also in line with government's directives to promote energy efficiency and clean power generation.

(2) Expert judgement/indicator analysis

The aims and outcomes of the Master in Sustainable Energy study programme is in conformity with the needs of the society and the labour market.

3.1.2. Evaluation of the conformity of the field and cycle study programme aims and outcomes with the mission, objectives of activities and strategy of the HEI

(1) Factual situation

According to the self-evaluation report, VMU is a community-based research, art and study institution, which pursues the mission of the University of Lithuania, established in Kaunas in 1922, creates liberal learning conditions for an individual, develops partnerships, takes active part in the life of Kaunas, advances the future of Lithuania, and contributes to the global cultural and academic development. The strategy is based on 5 fields with more detailed objectives: 1. Socially active and responsible community. 2. Reliable international partner. 3.

Studies favourable for unfolding talents and personalities. 4. The highest level of science and arts. 5. Harmonious and creative environment.

VMU mission is focused on the area in which the study program Sustainable Energy addresses the issues of technology development, development of engineering tools and research for the implementation of the university's mission.

According to the self-evaluation report, the aim of the program is to provide students with the physical, social, technological and other knowledge necessary for professional activities, thus contributing to the development of world culture and science. This is in line with the University's mission and strategic goals, promoting the interdisciplinarity of study programs, ensuring the integration of research into the study process, and promoting innovative learning methods.

During the visit, interviews with academic staff and students demonstrated that the educational offering is underpinned by the high-quality research undertaken by staff and the strong collaboration with industry and international research organisations.

(2) Expert judgement/indicator analysis

Sustainable Energy aims and outcomes are in the conformity with the mission of VMU, which is to provide research-based studies of Sustainable energy, create and transfer knowledge and innovative technologies for the sustainable development and innovative growth of the country, and provide open-minded, creative environment inspiring leaders and talented individuals.

3.1.3. Evaluation of the compliance of the field and cycle study programme with legal requirements

(1) Factual situation

The scope and structure of the study programme meet the general requirements for the execution of studies and the requirements of the description of the study field. The study programme of Renewable Energy (master degree) has 120 study credits, with 72 credits for the study field. Credits are allocated for achieving necessary outcomes: the field studies providing the learning outcomes established under the field description, the studies specified by the University or optional studies, and the final degree project.

(2) Expert judgement/indicator analysis

Master in Sustainable Energy study programme is in compliance with applicable legal requirements of the field and cycle study programmes.

3.1.4. Evaluation of compatibility of aims, learning outcomes, teaching/learning and assessment methods of the field and cycle study programmes

(1) Factual situation

The self-evaluation report provides information about general aims and learning outcomes of the programme and links between study subjects and general learning outcomes were provided. They are in compliance with the provisions of the EUR-ACE Accreditation standard for engineering study programmes and with the Description of Study Cycles.

There is no matrix supplied that provides mapping between the specific learning outcomes and the courses of study of the programme of Energy Engineering.

Teaching methods are regulated by the General Requirements for the Conduct of Studies, as outlined in a document published by the University which states that the contact work must be at least 20%. The document also stipulates the number of credits allocated for each type of activity. Student workload includes the standard, regular number of hours required to complete a planned activity in a subject. Student workload includes time spent in classrooms, laboratories, internships, time performing individual or group tasks, preparing for assessment.

The implementation of the study program encourages the creativity and innovation of teachers by using a wide variety of active teaching/learning methods and the flexibility of their use: interpretation; preparation and presentation of reports; case analysis, problem solving, demonstration, project preparation and presentation, information analysis and summarization, video review and internships

(2) Expert judgement/indicator analysis

The assignment of the aims to the programmes is appropriate. The aims of the study programmes are in line with the expected learning outcomes. Methods of teaching and assessment are suitable for this study cycle as verified from interviews of teachers and students during the visit.

It would be useful to prepare a matrix to map out specific learning outcomes and the courses of study of the programme.

3.1.5. Evaluation of the totality of the field and cycle study programme subjects/modules, which ensures consistent development of competences of students

(1) Factual situation

As a masters study programme with emphasis on research element, at the beginning of the studies, in the first semester, the subjects, Research methodology, Measurements in Biosystem Engineering and Mathematical Statistics and Modelling are included in the study plan. There is a subject devoted to research work in each semester of the study programme.

By analysing subject/modules descriptions the experts have found that the list of literature sources is, to a reasonable extent, up to date. Staff are engaged in research and thus feed their research experience into their teaching. However, from talking to staff, it is clear that latest knowledge provided to students is related to topics of research at the University

(2) Expert judgement/indicator analysis

The structure of the study programme ensures consistent development of competences of students. However, it is difficult to understand the relations of the subjects with learning outcomes without a relation matrix provided.
Staff engagement in high quality research that links to teaching provide students with up-to-date knowledge.

3.1.6. Evaluation of opportunities for students to personalise the structure of field study programmes according to their personal learning objectives and intended learning outcomes

(1) Factual situation

The university provides students with the opportunity to study according to an individual study schedule in order to meet the learning needs of each student. The schedule of individual studies is made taking into account the study program and individual study plans. The individual study schedule regulates the time distribution of the studied subjects, the forms and procedure of assessment, the number and time of consultations, the form and procedure of assessment, the start and end dates of the session. Studies according to the individual study schedule are regulated by the Description of the Procedure for Providing the Individual Study Schedule, which is provided as a public document on the VMU website.

(2) Expert judgement/indicator analysis

Master in Sustainable Energy study programme has wide opportunities to personalise the structure of field study programmes according to their personal learning objectives and intended learning outcomes.

3.1.7. Evaluation of compliance of final theses with the field and cycle requirements

(1) Factual situation

The procedures for the preparation and defence of the final theses are regulated by the VMU Study Regulations and the description of the general procedure for the preparation and defence of final theses. The description establishes the general requirements for the preparation and defence of first and second cycle, integrated and professional studies final theses, with specific subject requirements provided.

Students can defend their final thesis after completing the compulsory study program. Final theses are defended at the end of the last semester. Adequate processes are put in place for unsuccessful defence.

The topics of the final theses in the study program are in line with the purpose of the Sustainable Energy study program, some topics are formulated taking into account the recommendations of the social partners and the market demand in accordance with the requirements of the description of energy engineering study field.

(2) Expert judgement/indicator analysis

Master in Sustainable Energy study programme is in compliance with the field and cycle requirements.

Strengths and weaknesses of this evaluation area:

(1) Strengths:

1. Delivering a programme that links to strong research culture at the institution.
2. The strong links with social partners.

(2) Weaknesses:

1. Lack of detailed mapping of detailed learning outcomes and study subjects.

3.2. LINKS BETWEEN SCIENCE (ART) AND STUDIES

Links between science (art) and study activities shall be assessed in accordance with the following indicators:

3.2.1. Evaluation of the sufficiency of the science (applied science, art) activities implemented by the HEI for the field of research (art) related to the field of study

(1) Factual situation

According to the Self Evaluation Report, research activities take place in institutes, and in other departments of Vytautas Magnus University - in clusters, i.e., active groups of researchers in various fields, conducting joint research, integrating studies and science, combining the research potential of several departments. There are 44 science clusters at the University. Statistics show that the number of high-level publications is increasing. The topics of the ongoing research are closely related to the subjects taught by the majority of teachers. Teachers have published publications having a citation index in 2017 - 28, 2018 - 24, 2019 - 28, 2020 - 28 articles and 120 peer-reviewed articles in international databases. Master students are employed as part of a full-time researcher's post in projects or projects organised by Research Council of Lithuania. The Research and Arts Unit of the Research and Innovation Department monitors the efficiency of the activities of research and experimental development units-clusters. The efficiency of scientific activity is assessed and funds are allocated taking into account the following indicators: results of scientific production; results of other scientific activities (conferences, seminars, exhibitions, etc.; the contribution of the R&D unit to the study process; correspondence of working time of researchers involved in the activities of the R&D unit.

During the interviews, it was confirmed that the staff actively participates in research work, projects. They prepare publications, which reflect the results of the research obtained during the implementation of projects, the topics of which are closely related to the study subjects.

(2) Expert judgement/indicator analysis

The teaching staff is high motivated, has enough competence, there is a good level of science, the university creates the conditions to do research at the required level. The conditions created for the staff in forming the pedagogical load are within the requirement of the HEI in order to achieve the learning outcomes. There is a good level of research interest.

3.2.2. Evaluation of the link between the content of studies and the latest developments in science, art and technology

(1) Factual situation

The Self Evaluation Report states that the results of the research carried out by the research groups are integrated into the study subjects of the Sustainable Energy study program, for example, the projects "Increasing methane concentration in biogas production using biochemical methods" and "Use of digested bio-substrate for agricultural fertilization" are related to Renewable energy sources; The project "Dissemination of Innovative Engineering Solutions and Thermal Energy Process Management Systems for Increasing the Sustainability of Storage Technologies for Juicy Crop Products" is related to the subject Sustainability of Renewable Energy; the project "Boosting the sustainability of the urban water cycle: energy harvesting in the water industry using micro-hydropower technology (LIFE NEXUS)" deals with the subjects Integration of Renewable Energy to Energy Systems and Hydropower. There are similar links with other projects and subjects.

During the interviews, the most statements made in the self-analysis were confirmed, but some students were still somewhat passive.

(2) Expert judgement/indicator analysis

To disseminate the research results, the teachers of the study program organize international scientific conferences "BALTTRIB", "Mobile Technology" and "Human and Nature Safety", which provide opportunities to share their research experience with researchers from other countries and students have the opportunity to participate with presentation or get familiar with the latest research achievements. A strong focus on research activities and a relatively large number of different R&D projects

3.2.3. Evaluation of conditions for students to get involved in scientific (applied science, art) activities consistent with their study cycle

(1) Factual situation

The Self Evaluation Report states that all students of the second study cycle prepare research-based theses, and the results of the research are published in science or science popularization journals and presented at conferences. The conference "Young Scientist" is organized annually at the University. Masters of the Sustainable Energy Study Program in 2017 presented 7 presentations at conferences, in 2018 – 12, in 2019 – 9 and in 2020 - 8 presentations. The involvement of students in the research carried out is encouraged. The most advanced students are involved in research and internships at Faculty institutes supported by projects of Research Council of Lithuania. In the period of 2017 - 2020, 1-2 students of the Sustainable Energy Program worked continuously in the scientific laboratories of the University.

Interviews showed that the Final Thesis is related to either research topics or issues relevant to the social partners. Some students confirmed being involved in project activities.

(2) Expert judgement/indicator analysis

The Final Thesis is related to either research topics or issues relevant to the social partners. Some students confirmed being involved in project activities. To disseminate the research

results, the teachers of the study program organize international scientific conferences, which provide opportunities to share their research experience with researchers from other countries and students have the opportunity to participate with presentation or get familiar with the latest research achievements.

Strengths and weaknesses of this evaluation area:

(1) Strengths:

1. There is the right link between science and study at the institution.
2. By forming a pedagogical load, needed conditions are created for teachers to do scientific work.
3. HEI opportunities to involve students in research activities by recruiting them.
4. A strong focus on research activities and a relatively large number of different R&D projects.

(2) Weaknesses:

1. Students could be more involved in research activities.
2. Social partners could be more involved.

3.3. STUDENT ADMISSION AND SUPPORT

Student admission and support shall be evaluated according to the following indicators:

3.3.1. Evaluation of the suitability and publicity of student selection and admission criteria and process

(1) Factual situation

The study program has a flexible admission system, which allows a wide range of undergraduates to join the program. These may not be undergraduates from energy engineering field as long as they have a sufficient number of credits and relevant first cycle study degree (such as mechanical engineering or physics) or equivalent for foreign students. Also, the admission system aims to college students with a professional bachelor's degree. A system of additional studies is implemented, which allows them to enrol university-level master studies. The structure of admission scores is more-less traditional, giving a major weight to weighted average of the grades of all subjects in the bachelor's program. However, scientific background of applicants is not evaluated.

The admission results in 2017-2020 are stable, the program attracts around 10 applicants, around 8 of them are accepted into state funded places. On the positive side, the number of students in the additional studies is increasing, which shows that the university successfully attracts undergraduates from colleges. Also, in 2019-2020 there were students in non-funded places, which reveal that there are people who feel that studies are valuable and good investment in education.

Another positive thing is a highly competitive score average of admitted students: 8.18 is a very good result in the context of Lithuanian master studies. A small percentage of drop-out students reveal that selection criteria is sufficient to select capable students.

The promotion of studies is traditional, based on website publications, social networks, magazines and studies' fairs. However, students state that there is need for more promotion of the study field. They feel that communication on social media is not sufficient.

(2) Expert judgement/indicator analysis

The admission system is well-developed and rationally adapted to the needs of undergraduates in the scale of Lithuania. It could be stated, that during evaluation period, there were no problems: it ensured a steady flow of new students. Another positive insight: admission results were not affected by the gradual increase of minimum admission score for state-funded places in Lithuania (up to 5.4 in 2019). That means that this field was able to attract students with good achievements even before. Regarding the students' admission system, only one advise could be noted: university master's studies are research oriented, therefore a composition of competitive score should include the scientific background of applicants.

However, there are some negative signs for the future. First of all, the university is closing its only bachelor program of the energy engineering field in 2021. This means losing one of the sources of students for master's program. Secondly, the energy engineering field is getting less popular in Lithuania in general. Therefore, the management have to take additional actions in order to keep the admission results steady. There is a need for a detailed action plan, based on the school graduates' statistics, market needs analysis, competitors' analysis and possible solutions to promote the program.

The university could take into account students' opinion on scarce promotion of study field and poor communication on social media.

3.3.2. Evaluation of the procedure of recognition of foreign qualifications, partial studies and prior non-formal and informal learning and its application

(1) Factual situation

The University has regulations and procedures for recognition of foreign qualifications, partial studies and prior non-formal and informal learning. The requirements and rules, based on the information provided in the self-evaluation report, are adequate. The recognition of previous qualifications and foreign studies focuses on the analysis of studied modules and their outcomes, they are compared to the outcomes of Sustainable Energy modules. In the case of informal/non-formal studies, the focus is on assessment of the knowledge. During the evaluation period, the recognition was applied to only 2 students, who participated in the mobility program.

(2) Expert judgement/indicator analysis

Based on the cases of recognition, it can be concluded that the recognition system is functional. Also, students did not mention any negative aspects of it, which shows that system fits their needs. On the other hand, the management could pay more attention to this sphere: it should be recognized as an opportunity to get education from different sources, i.e. online learning platforms. More promotion for the recognition system could result in more applications, since students would be aware of this possibility and its opportunities.

3.3.3. Evaluation of conditions for ensuring academic mobility of students.

(1) Factual situation

Formally, all students have an opportunity to participate in mobility programs. However, only 4 students took a part in mobility programs during evaluated period. The management notes that the main reason for this drawback is a high percentage of working students.

In case of upcoming students, the situation is promising. In 2017-2019, 10 students from abroad come to study in the field. They received their study material in English.

(2) Expert judgement/indicator analysis

There is space for improvement in the case of ensuring conditions for outgoing students. There is a lack of information about students' encouragement and support for academic mobility. Also, students who return from abroad should systematically share their experience in order to attract other students. Of course, many students are working and have family obligations, but a deeper analysis and understanding of students' situation could still improve the situation, in example cooperation with employers.

In the case of upcoming students, there is a lot of potential. The experience of previous visitors and a more intense cooperation with foreign HEIs could give even better results. Of course, in that case, there is a need to improve the quality of modules in English. As it was found out, now foreign students do not get English lectures, only materials in English.

3.3.4. Assessment of the suitability, adequacy and effectiveness of the academic, financial, social, psychological and personal support provided to the students of the field

(1) Factual situation

Both self-evaluation report and students state, that academic support is very good. The academic information is sufficient and timely. All master students are obliged to write at least one article and participate in 1 conference. Students are positive about this experience, which shows an adequate academic support and students' encouragement to take a part in scientific research. Furthermore, the feedback on final assessments and thesis writing is also satisfactory: students receive both positive and negative remarks. There is a practise of projects' improving after lecturers' feedback. Every teacher spends 20 hours per semester consulting students on course-related issues – students are satisfied with it.

On the negative side, students feel that they are not included in studies improving process: their feedback on studies quality is collected, but they are not aware of further actions. Students do not have a clear understanding about study program committee functions. In general, meetings revealed that students' representation in academic matters has to be improved.

The university has a traditional system of financial social support. In the case of financial help, students have an opportunity to apply for state-provided study loans. When students participate in events related to university representation, their costs can be refunded. Also, payments for studies could be postponed in a case of motivated request. The university provides social and motivational (academic) scholarships. Further, the university ensures a possibility to settle in dormitories. Students state that they are satisfied with university's social support, including the quality of accommodation services.

Finally, all students of the field have access to free psychological consultations and career counselling. Students notice that social partners participation in lectures also positively impacts their career counselling.

The university provides good conditions for students with disabilities.

(2) Expert judgement/indicator analysis

In general, the academic, financial, social, psychological and personal support provided to the students is sufficient and adequate. On the other hand, students' representation, as a part of academic support, has to receive more attention from the management. At this moment, students seem to be passive receivers of the support, but they are not empowered to improve academic processes and university's support to students.

3.3.5 Evaluation of the sufficiency of study information and student counselling

(1) Factual situation

The self-evaluation report shows that the university uses a wide range of communication channels: personal emails, intranet, study events, website. The administration also provides a personal counselling on all topics of studies. The newly enrolled students have special meetings with faculty administration in order to learn about study principles in more detail. In general, students state that communication is appropriate and sufficient, announcements on study process always reach them without any problems.

Student counselling, in relation with academic support, is well developed. Students feel that they get lecturers attention as much as they need. During the meeting, students stated that they attend consultations at least twice a year.

In order to make further improvements, students emphasized that the current system of schedules announcement is not convenient. Specifically, the format of schedules is not practical, therefore students have to reform them each time as they are announced.

(2) Expert judgement/indicator analysis

Considering the information of self-evaluation report and students' confirmation, it can be stated that study field have a traditional system of study information and student counselling, which is sufficient.

For improvement, the management should review the format of schedules announcing.

Strengths and weaknesses of this evaluation area:

(1) Strengths:

1. Students are encouraged to participate in research, there is a strong academic support.
2. The program successfully attracts undergraduates from colleges and students from abroad.
3. During the period of evaluation, the field managed to attract students with relatively high competitive scores.

(2) Weaknesses:

1. The management has to take actions in order to assure steady admission results in the future: after the termination of bachelor's program, there may be risks related to students' attraction.
2. Students' representation is weak. In order to provide a high level academic, social and personal support, student representatives have to be active and all students have to be informed about their representatives' role.
3. The mobility of outgoing students is low. It could be increased by a deeper analysis of mobility conditions, because high percentage of working students is not a critical argument for low mobility.

3.4. TEACHING AND LEARNING, STUDENT PERFORMANCE AND GRADUATE EMPLOYMENT

Studying, student performance and graduate employment shall be evaluated according to the following indicators:

3.4.1. Evaluation of the teaching and learning process that enables to take into account the needs of the students and enable them to achieve the intended learning outcomes

(1) Factual situation

The teaching and learning process of the programme is constructed of intensive contact work in relation with classroom and individual student work. In each study subject, classical learning methods (lectures, laboratory works, exercises, seminars), active, inclusive (guest lecture, situation analysis, experiment, group discussion, preparation of reports, performance of individual tasks and their presentation) are used.

The program also uses non-formal assessment methods to assess student achievement, where no grade is awarded for student work.

Further opportunities for graduate studies are described.

During the visit, it became clear that there are very small number of foreign students, typically on or two, and hence they need to undergo a special scheme of study which does not necessarily allow them equal opportunities to learn compared to home students.

(2) Expert judgement/indicator analysis

According to the information provided in the self-evaluation report, the university is looking for ways to adapt to the needs of students, which is very good, but the proper study process and its quality must be kept in mind. The lack of a clear study process can lead to students losing focus on their studies process and progress.

The study process and learning methods are described superficially.

During the visit, it was noticed that the merging of universities allowed to improve the study process by adopting good practices from both institutions. In addition, there was an opportunity to share resources.

Students indicated that they would like more lectures from business representatives.

A more equitable process for learning should be provided to foreign students.

3.4.2. Evaluation of conditions ensuring access to study for socially vulnerable groups and students with special needs

(1) Factual situation

According to the SER, socially vulnerable groups and students with special needs can study according to an individual study schedule. Such studies are regulated by VMU Description of the Procedure for Providing the Individual Study Schedule.

In cases of severe disability, students are partially or completely exempt from tuition fees.

Special conditions are created for students with mobility disabilities: students are allowed to park their cars near the buildings, access to buildings is maintained, the necessary equipment is established for the disabled in libraries, classrooms are set with suitable furniture and students can settle in specially adapted dormitory rooms.

During the assessment period, there were no students of the program studying according to an individual schedule and belonging to socially vulnerable groups.

(2) Expert judgement/indicator analysis

From the information provided in self-evaluation report, the university has adequate provision for students from socially vulnerable groups and students with special needs. However, it is advisable to provide proactive training and discussion to educate the community and to be prepared for potential challenges.

3.4.3. Evaluation of the systematic nature of the monitoring of student study progress and feedback to students to promote self-assessment and subsequent planning of study progress

(1) Factual situation

The self-evaluation report states that the monitoring of student learning progress is regulated by VMU Study Regulations and the Description of Procedure for Student Learning Achievement Monitoring and Assistance. The procedure has a clear process, which is mentioned in the report.

Monitoring of students' study progress is carried out through the study information system Studies and Moodle. The self-evaluation report did not provide details on this process and in the university is responsible for its implementation.

(2) Expert judgement/indicator analysis

The progress of the students in the study field is monitored, however, the process is not fully and consistently described. The comparison of study processes with other study programs would allow better assessment of the process and initiate improvements if required. In addition, comparison with other peers would provide a more complete picture and give ideas how the process could be improved further.

3.4.4. Evaluation of the feedback provided to students in the course of the studies to promote self-assessment and subsequent planning of study progress

(1) Factual situation

According to the self-evaluation report, results of the interim reports are published and discussed during the sessions within two weeks after the interim report. The final results are published on the University intranet within three working days and then discussed with a group of students takes place.
There is no explanation how feedback is used for further planning of study progress. During the visits, it was clarified that feedback is also provided to students in person.

Students identified that they provide feedback to Study Programme Committees, but do not receive answers about what is happening to them and how it helps to improve the study process.

(2) Expert judgement/indicator analysis

The self-evaluation report and visit revealed that there is no systematic approach and procedures for providing feedback for the students about their study process performance and this rather dependant on each teacher's initiative and method.

Students' views are not always considered, and decisions are not clearly communicated.
During discussions with employers and alumni, it was observed that feedback is provided during live meetings and discussions. There are no regular responses or clear indications of how social partners are supporting the university

3.4.5. Evaluation of employability of graduates and graduate career tracking in the study field.

(1) Factual situation

In the field of study, the employment and careers of graduates are monitored, and information related to graduate career tracking is provided. The collection of feedback on employed graduates and graduates' feedback on completed study programs is provided.

The University has an active VMU Alumni Club whose main aim is to provide a platform for VMU alumni and maintain close relations with the University.

During the visit, employers expressed the view that students who have completed the study program are properly prepared to enter the job market. Some of the students who have completed these studies are pursuing doctoral studies at other institutes.

(2) Expert judgement/indicator analysis
Information on employability of graduates and graduate career tracking examples in the study field is provided and analysed. Several sources of information that provide feedback make it possible to see a more complete picture of the study program.

3.4.6. Evaluation of the implementation of policies to ensure academic integrity, tolerance and non-discrimination

(1) Factual situation

The principles of integrity are defined in the VMU Statute, non-discrimination measures are regulated by the Code of Ethics of VMU, the VMU regulations on the prevention of plagiarism in the preparation of students' written works, and the Study Regulations. Brief procedure of the policy regulation is provided.

Upon enrolment, each student should sign the Declaration of Integrity of a Student, which is valid throughout the entire duration of the study contract.

(2) Expert judgement/indicator analysis

The principles and processes of the policy of ensuring academic integrity, tolerance and non-discrimination implementation is described in comprehensive manner. The provided documents and rules enable the members of the university to know and act according to the established rules. However, a single acquaintance with the roles may not always ensure full compliance. Re-introduction through tests, videos could improve everyone's understanding and adherence.

3.4.7. Evaluation of the effectiveness of the application of procedures for the submission and examination of appeals and complaints regarding the study process within the field studies

(1) Factual situation

The University provided a description of the procedure for submitting and examining student appeals and complaints (VMU Description of procedure for appeal investigation; the plagiarism prevention procedures of VMU and VMU Study Regulations). The process of appeal or complaint is described.

Within the period of this self-evaluation, no written appeals or complaints regarding study programmes were submitted.

(2) Expert judgement/indicator analysis

The application of the procedures for the submission and examination of appeals and complaints regarding the study process is described and is considered adequate. The involvement of student representations in addressing these potential issues is crucial to the process.

Strengths and weaknesses of this evaluation area:

(1) Strengths:

1. Involvement of employers in the assessment of studies.
2. The active Alumni club.

(2) Weaknesses:

1. Insufficient involvement and promotion in attracting potential students.
2. There is no clear and consistent process to give students feedback on their work and assessment results.
3. Involvement of students in the study program improvement process.

3.5. TEACHING STAFF

Study field teaching staff shall be evaluated in accordance with the following indicators:

3.5.1. Evaluation of the adequacy of the number, qualification and competence (scientific, didactic, professional) of teaching staff within a field study programme(s) at the HEI in order to achieve the learning outcomes

(1) Factual situation

As provided in the Self Evaluation Report, 18 lecturers are the teaching force, 11 of them professors and 7 associate professors, all of the hold a PhD. The average working hours is 760 for professors and 880 for associate professors, with 52% and 60% of pedagogical time, respectively. Most of them (except three) have more than 10 years of teaching experience.
Their scientific interest is very related to the lecturing assignment.
The staff is half-time lectured in the study program, half-time devoted to science.

During the visit, it was found that the background of the lecturers is adequate to achieve the learning outcomes. The staff is competent enough to work in the study program. The staff confirmed that is half-time lectured in the study program, half-time devoted to science.

(2) Expert judgement/indicator analysis

The academic level of lecturers is high, with more than 50% professors. The average working hours is low, allowing time for research.
Staff time is appropriately allocated for lectures with half of the time devoted to science.

3.5.2. Evaluation of conditions for ensuring teaching staffs' academic mobility (not applicable to studies carried out by HEIs operating under the conditions of exile)

(1) Factual situation

The Self Evaluation Report states that an average of 6 lecturers go abroad per year and an average of 4 incoming lecturers are hosted, all of them within the Erasmus+ program.

Information collected during the visit show that Erasmus mobility is encouraged by the faculty, but there is also support from the Lithuanian Research Council. The main contacts are with Denmark, Italy, and Germany. Around 6-7 lecturers participate every year. Lecturers outgoing mobility actions are short term, up to 2 weeks.

Some researchers from abroad come to perform their research at master level (higher numbers but for shorter periods of time) and at PhD level (example of collaboration with Palermo is given).

(2) Expert judgement/indicator analysis

The number of outgoing and incoming lecturers is good given the number of lecturers. There is encouragement for mobility and that lecturers feel that the support for the mobility is good.

Academic mobility is ensured at the university.

3.5.3. Evaluation of the conditions to improve the competences of the teaching staff

(1) Factual situation

According to the Self Evaluation Report, at VMU, teacher professional development is organised under 8 groups of competences: higher education didactics competences, digital competences, research competences, management competences, foreign language competences, intercultural competences, subject-related competences and personal competences.

Lecturers on the program participated in different actions, including short-term internships abroad, professional development courses, and conferences. Special attention is given to language improvement.

Research clusters were established in 2008. These are groups of researchers in various fields conducting joint research, integrating studies and science, combining the research potential of several departments, taking into account Lithuanian and European research development programs and seeking to promote interdisciplinary research.

Interviews during the visit showed that the courses organised are quite popular, especially language courses. Lectures provided by social partners are highlighted.

There is a plan by the faculty to encourage lecturers to participate in fairs abroad to improve the knowledge on recent developments but also to find new contacts.

Although the self-evaluation report mentions the research clusters being formed since 2008, interviews during the visit revealed that there have been no clusters formed in this study programme yet.

(2) Expert judgement/indicator analysis

It is very good that competences are not only in pedagogical aspects. Competence encouragement is very good, even at international level.

Strengths and weaknesses of this evaluation area:

(1) Strengths:

1. The background of the lecturers is the needed to achieve the learning outcomes.
2. There is encouragement for mobility and that lecturers feel that the support for the mobility is good.
3. It is very good that competences are not only in pedagogical aspects. Competence encouragement is very good, even at international level.
4. The staff is half-time lectured in the study program, half-time devoted to science.

(2) Weaknesses:

1. It would be advisable for the social partners to be more involved in science-related activities.
2. Research clusters have been created in this study field yet, but their influence is not yet very clear.

3.6. LEARNING FACILITIES AND RESOURSES

Study field learning facilities and resources should be evaluated according to the following criteria:

3.6.1. Evaluation of the suitability and adequacy of the physical, informational and financial resources of the field studies to ensure an effective learning process

(1) Factual situation

The Self-Evaluation Report states that most of the subject lectures are given in the Faculty auditoriums, a total of 210 working places for students. The rooms used for studies meet the requirements of occupational safety and hygiene standards.

There are 5 laboratories for the studies. All the buildings are adjusted for disabled people. Students and teachers are provided by a virtual learning environment and collaboration systems – Outlook and Moodle.

Library has he required equipment. The short video provided shows good infrastructure at university level (in lecture rooms, library, etc.), but little detail on the laboratories used in this study programme.

Interviews during the visit showed that laboratories are very well equipped, considering that this is a master degree, laboratories oriented to research help in giving good learning opportunities to students. Laboratories are run by lecturers-professors and by assistants. Safety in laboratories is very well organised.

The dormitories are very good, above standard. They have all needed services are the price is 3-4 times cheaper than renting a room in the city.

The library has good resources, including also electronic material (about 80% of material is electronic today) and both in English and in Lithuanian (due to the upcoming of foreign students, material in Russian is also available). Subscription to data bases (EBSCO Publishing, ScienceDirect, etc.) is enough both for teaching and research activities. Some software licences are not adequate since demo versions are used.

The IT service is very good. Internet in the faculty is very good. Moreover, students have remote access to university computers 24 hrs/day, allowing them to use the needed software. Finally, social partners like the Lithuanian Energy Institution allow students from VMU to use their labs.

(2) Expert judgement/indicator analysis

There is sufficient number of working places in the laboratory for students on the study programme. Laboratories are research oriented (including exchange with research institution

such as LEI). Safety in laboratories is very well organised. The available dormitories are above standard. The library is very well equipped, at all levels. Internet access is ensured. IT service is very good.

3.6.2. Evaluation of the planning and upgrading of resources needed to carry out the field studies

(1) Factual situation

According to the Self Evaluation Report, about 20% of computers is renewed annually. Almost all computers are connected to a common network and have an Internet connection, VMU computer network security systems are constantly updated.
Every six months, the software is audited and updated or supplemented.
When planning the renewal of information resources relevant to studies, the necessary documents for study programmes are coordinated with the Library by the teachers responsible for study programmes and courses.
Although the faculty has funding to get new books and resources for teaching, lecturers also use funding coming from research projects to upgrade books.

During the visit, it was confirmed that the faculty has funding for laboratories maintenance. Some of those laboratories are shared between different faculties and different study fields and study programmes. In total, around 50 master students and 20 bachelor students use the laboratories evaluated.

Laboratories upgrading is very much based on research funding. There is funding from social partners and some funding coming from the state for research equipment that it is used for master students.

Upgrading of computers and software is not sufficient; although software upgrading is prioritized by the faculty, some used software is still not enough.

(2) Expert judgement/indicator analysis

Today it is necessary that all computers are connected to internet. Renewing 20% computers per year means that computers last for 5 years, a bit too long for today standards.

Updating of software is not often sufficient for the student's needs as mentioned by the students during interviews.

Maintenance of laboratories is well organised and most funding come from the faculty.

Strengths and weaknesses of this evaluation area:

(1) Strengths:

1. Laboratories are very well equipped, considering that this is a master degree, laboratories oriented to research help in giving good learning opportunities to students.
2. Library, dormitories, and IT services are very good.
3. The social partners help to organize and improve the study process.
4. It should be noted that the university attracts students from rural areas.

(2) Weaknesses:

1. There are no suitable future plans for renovation of the laboratories.
2. Upgrading of computers and software is not enough
3. Students have complaints about certain software.

3.7. STUDY QUALITY MANAGEMENT AND PUBLIC INFORMATION

Study quality management and publicity shall be evaluated according to the following indicators:

3.7.1. Evaluation of the effectiveness of the internal quality assurance system of the studies

(1) Factual situation

The self-evaluation report provided details about the quality assurance systems. The report explains the roles and competences of the committees for the various tasks of quality assurance:
Faculty/Academy Council (Council), the Study Programme Committee (SPC), Dean of the Faculty/Academy (Chancellor of the Academy) and Head of the Department.

This structure resembles the general organisation of quality issues in European Universities.

At the Faculty level, the Council is responsible for the quality assurance of the whole study field. The council is responsible for approving renewal of the programme annually as well as the internal assessment and study programmes quality improvements plan.
The SPC role is to supervise the study programme, evaluate its quality and update it. The SPC includes members from teachers, students and social partners.
Decisions regarding the quality of studies and their management are based on the Standards and Guidelines for Quality Assurance in the European Higher Education Area (2015), national and VMU legal acts

The faculty administration also participates in the process of internal quality assurance and management of the field, including the director of the institute supervising the program, who ensures the material provision of the program, financially encourages the study program committee for work performed, helps to solve the need for human resources

The faculty prepares a yearly plan for the improvement of the quality of its study programmes.
The SER report stipulates that student are involved in the activities of the University's governing bodies at all levels and its operating commissions.
Surveys are carried out regularly with graduates and employers; their feedback results are used for the improvement of specific study programmes. Taking part in the surveys is voluntary and anonymous.
Additionally, there are yearly meetings and round table discussion with social stakeholders. External social stakeholders also have the opportunity to participate in the defence of the final degree projects.

During the interviews the management of the formal instruments and processes was discussed with the senior management and the SER staff. The group of teachers complemented the interview results with examples, such as the continuous coaching of students during their theses in cooperation with representatives of social partners.
The students confirmed their positive experience and participation with the process.

Discussion with teachers and foreign students revealed that they need a special arrangement for their studies particularly lectures and material that are available in Lithuanian only.

(2) Expert judgement/indicator analysis

The instruments and processes the university uses are generally well-developed and are suitable for improving the quality of teaching. The senior management and self-evaluation report staff convinced the panel that all groups are familiar with the instruments and processes and use it in the way the report describes.

Discussion with Social partners however revealed that there is no systematic process of gathering information from them on the quality of the programmes and that improvements to the process may be required to ensure a robust and consistent process is put in place to inform programme improvements.

3.7.2. Evaluation of the effectiveness of the involvement of stakeholders (students and other stakeholders) in internal quality assurance

(1) Factual situation

The university relies on information on the study programme collected from students, alumni/graduates and employers to assess the programme quality and inform the continuous improvement process of the contents and delivery methods of the programme.

Since the spring of 2020, the university has also been conducting a survey of teachers. The situation about teaching and professional development, students' involvement in studies is analysed, and a working condition is created for teaching. The opinion and suggestions of teachers are used to improve the quality of studies and planning professional development.

The faculty places emphasis on the opinion of social partners as stated in the report, through inviting them to the ongoing meetings of the programme committee and uses their views to inform programme improvements.

During the interview with students, they mentioned that the management collects data from them and listens to their views. However, they indicated that they are not consulted when finding solutions to the issues raised.

(2) Expert judgement/indicator analysis

The self-evaluation report and the confirmation by stakeholders convinced the panel that the involvement of stakeholders including students is adequate.
However, improvements to the process of engaging social partners may be required as described in section 3.7.1
It is recommended that students are given the opportunity to participate in resolving issues raised during consultations with them.

3.7.3. Evaluation of the collection, use and publication of information on studies, their evaluation and improvement processes and outcomes

(1) Factual situation

Information gathered about the study programme are analysed on annual basis to identify requirements for improvements in a timely manner.

Results of the survey of students are placed online where teachers have access to such information so that they are aware of the feedback on their courses.

All decisions by the SPC regarding studies, issues on assessment and improvement, are publicised for stakeholders through suitable channels. The Chairperson of SPC publicises information for the teachers, social partners and other stakeholders. The students' representatives in the SPC publicise the decisions to other students of the study programme.

An example is given in the SER about modifications to the study programme by including hydropower following expression of interest by students in 2018 and another example of including elective subjects following students' suggestions in 2019 (SER page 43).

The SER states that results of surveys are published on the VMU website within three months of conducting the surveys.

Information about the goals, methods, procedures and results of the program quality assessment are discussed in the meetings of the Faculty Council, meetings of the academic community, meetings of institutes, discussions with teachers and students. The evaluation of study programs and the needs for improvement are also discussed with employers, in meetings with businesspersons, and in the Career Day events organised annually by the Career Centre.

(2) Expert judgement/indicator analysis

The self-evaluation report and information gathered during the visit from senior management, teachers, students and social partners confirm that the collection use and publication of information about the study programmes and their improvements are adequate.

3.7.4. Evaluation of the opinion of the field students (collected in the ways and by the means chosen by the SKVC or the HEI) about the quality of the studies at the HEI

(1) Factual situation

The University explains the conduction of their surveys in a detailed way in the self-evaluation report (p. 43), including the scales they use. The graduates of the Sustainable Energy are distinguished as the strengths: the professionalism of the teachers, the material base, the communication of the teachers with the students, the assistance of the faculty administration.

Respondents assessed the compliance of the content of study subjects with the aim of the study program with a score of 3.56 (scale 1-4); 3.67 points - teachers, seminars, laboratory works and other study sessions met the students' study expectations; 3.56 points evaluates the generalized quality of the study program; 3.67 points - would recommend others to study in this study program

When assessing the skills acquired and developed in studies, graduates distinguish between knowledge and skills of speciality, Problem solving, communication and cooperation, information literacy, responsibility, time planning and creativity.
In addition, the Sustainable Energy programme is distinguished by the content of study subjects; benevolence, respect, communication of teachers; discussions with teachers; good compatibility of studies with work activities.
The SER report states that the previous evaluation recommended that the method of assessing teachers' performance by students is not fully satisfactory. Students do not obtain feedback information in any form about the assessment results.

VMU addressed these by the following measures: The questionnaire of the student survey conducted at VMU every semester has been prepared taking into account the concept of teaching and study quality, the best practices of various universities and coordinating the questions with the VMU community. The summarized results of the survey are published on the VMU website, in e-mails to students, in meetings with students, etc. Teachers are invited to familiarize students with the accepted changes in study subjects, taking into account the results of the survey.

(2) Expert judgement/indicator analysis

The panel considers that the measures to address the recommendation from the previous review has been adequately addressed and the current process is in line with expectations.

Strengths and weaknesses of this evaluation area:

(1) Strengths:

1. Quality assurance processes are of the required standard.
2. Consultation with students and acting upon their suggestions in a timely manner.

(2) Weaknesses:

1. Teaching foreign students requires further attention to ensure equity with home students.
2. Collecting information from social partners requires a more systematic approach.

IV. EXAMPLES OF EXCELLENCE

The institution has strong research culture, with good support for lecturers to undertake research and significant international collaboration which feeds into teaching and students projects.

The implementation of flexible teaching and learning methods that encourage active participation of students, e.g., study clusters that involve companies. Although currently there is only one cluster, this seems to be a plan or ambition for now that needs to be developed further.

V. RECOMMENDATIONS

Evaluation Area	Recommendations for the Evaluation Area (study cycle)
Intended and achieved learning outcomes and curriculum	It is recommended that the university conducts sufficient market research and analysis to identify future student intake size and adapt accordingly to reduce the risk of further fall in recruitment. Review the curriculum and introduce new material to support future market needs including more broad-based subjects and wider awareness of the energy market.
Links between science (art) and studies	It is recommended that social partners and students undertake more involvement in externally funded research activities
Student admission and support	The University should have a clear action plan to improve student recruitment to the programme It is recommended that students are more involved in identifying and developing solutions to reported problems in the students' surveys More efforts should be made to improve mobility for outgoing students.
Teaching and learning, student performance and graduate employment	There should be clear details about the monitoring of students' study progress which is carried out through the study information system Studies and Moodle, and clarify of the ownership of this process. A more consistent process of providing feedback to students needs to be developed.
Teaching staff	It is recommended that social partners get more involved in delivering expert lectures.
Learning facilities and resources	The university should have a suitable plan for the regular renovation and upgrade of laboratories The university should regularly upgrade the computers used by students. It is recommended to review software licences and ensure that they are updated to meet the educational requirements
Study quality management and public information	The college needs to improve the process of teaching foreign students when there is a small number to ensure that they have the same opportunities as home students More effort is required to collect systematic feedback on the study programmes from social partners

VI. SUMMARY

Vytautas Magnus University started a second cycle Sustainable Energy programme in 1994. This has evolved over time to meet the changing market requirements. Collaboration with other universities and research institutions have shaped the programme to focus on research into renewable energy resources and conversion technologies. These changes have strengthened the research activity at VMU and increased the attractiveness of the programme.

The programme is in line with societal needs as the country is undergoing a transition to become self-sufficient in power generation whole meeting international obligations for clean and sustainable energy system. It is also in line with government's directives to promote energy efficiency and clean power generation.

Sustainable Energy programme aims and outcomes are in the conformity with the mission of VMU, which is to provide research-based studies of Sustainable energy, create and transfer knowledge and innovative technologies for the sustainable development and innovative growth of the country, and provide open-minded, creative environment inspiring leaders and talented individuals.

The institution has a strong research culture, with staff engaged in externally funded projects that include international collaboration and collaboration with industry. Teaching staff use research to underpin their teaching and students get involved in practical research projects particularly for their final thesis.

Master in Sustainable Energy study programme has wide opportunities to personalise the structure of field study programmes according to their personal learning objectives and intended learning outcomes. The institution does not have detailed mapping of learning outcomes to study subjects. Although this may not be a legal requirement for the level of study, it is recommended that such mapping is undertaken to ensure suitability of the subjects and performing improvements if found necessary.

While all students have the opportunity to participate in mobility programs, only 4 students took a part in mobility programs during evaluated period. The university explains that the main reason for this drawback is a high percentage of working students. This however is an issue that needs to be addressed to improve opportunities for students to gain further knowledge.

All master students are obliged to write at least one article and participate in 1 conference. Students are positive about this experience, which shows an adequate academic support and students' encouragement to take a part in scientific research. Furthermore, the feedback on final assessments and thesis writing is also satisfactory: students receive both positive and negative remarks.

Students feel that they are not included in studies improving process: their feedback on studies quality is collected, but they are not aware of further actions. Students do not have a clear understanding about study program committee functions.

Special conditions are created for students with mobility disabilities: students are allowed to park their cars near the buildings, access to buildings is maintained, the necessary equipment

is established for the disabled in libraries, classrooms are set with suitable furniture and students can settle in specially adapted dormitory rooms.

Erasmus mobility of academic staff is encouraged by the faculty and there is support from the Lithuanian Research Council. The main contacts are with Denmark, Italy, and Germany. Around 6-7 lecturers participate every year. Lecturers outgoing mobility actions are short term, typically up to 2 weeks. The number of outgoing and incoming lecturers is good given the number of lecturers.

The library has good resources, including also electronic material (about 80% of material is electronic today) and both in English and in Lithuanian (due to the upcoming of foreign students, material in Russian is also available). Subscription to data bases (EBSCO Publishing, ScienceDirect, etc.) is enough both for teaching and research activities. However, more attention needs to be paid to provide suitable software licences.

Lectures are successful in attracting research funding that provides resources for laboratories maintenance. Some of those laboratories are shared between lecturers and different study fields and study programmes. However, laboratories upgrading is very much based on research funding. There is funding from social partners and some funding coming from the state for research equipment that it is used for master students. However, it seems that there is lack of investment from the University in laboratory equipment.

Discussion with Social partners revealed that there is no systematic process of gathering information from them on the quality of the programmes and that improvements to the process may be required to ensure a robust and consistent process is put in place to inform programme improvements.

Expert panel chairperson signature:

Prof. dr. Abdulnaser Sayma