STUDIJŲ KOKYBĖS VERTINIMO CENTRAS
CENTRE FOR QUALITY ASSESSMENT IN HIGHER EDUCATION

PRODUCTION and MANUFACTURING ENGINEERING FIELD OF STUDY

KLAIPEDA UNIVERSITY

EXTERNAL EVALUATION REPORT

Expert panel:

1. Panel chair: Prof. dr. Jasmina Casals-Terré;
2. Academic member: Associate professor dr. Tadej Petric;
3. Academic member: Prof. dr. Tavo Kangru;
4. Social partner representative: Dr. Vaidas Liesionis;
5. Student representative: Mr Matas Žalandauskas

SKVC coordinator: Dr. Ona Šakalienė

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I. INTRODUCTION

1.1. OUTLINE OF THE EVALUATION PROCESS

The field of study evaluations in Lithuanian higher education institutions (HEIs) are based on the following:

- Procedure for the External Evaluation and Accreditation of Studies, Evaluation Areas and Indicators, approved by the Minister of Education, Science, and Sport;
- Methodology of External Evaluation of Study Fields approved by the Director of the Centre for Quality Assessment in Higher Education (SKVC);
- Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG).

The evaluation is intended to support HEIs in continuous enhancement of their study process and to inform the public about the quality of programmes within the field of study.

The object of the evaluation is all programmes within a specific field of study. A separate assessment is given for each study cycle.

The evaluation process consists of the following main steps: 1) Self-evaluation and production of a self-evaluation report (SER) prepared by an HEI; 2) A site visit by the review panel to the HEI; 3) The external evaluation report (EER) production by the review panel; 4) EER review by the HEI; 5) EER review by the Study Evaluation Committee; 6) Accreditation decision taken by SKVC; 7) Appeal procedure (if initiated by the HEI); 8) Follow-up activities, which include the production of a Progress Report on Recommendations Implementation by the HEI.

The main outcome of the evaluation process is the EER prepared by the review panel. The HEI is forwarded the draft EER for feedback on any factual mistakes. The draft report is then subject to approval by the external Study Evaluation Committee, operating under SKVC. Once approved, the EER serves as the basis for an accreditation decision. If an HEI disagrees with the outcome of the evaluation, it can file an appeal. On the basis of the approved EER, SKVC takes one of the following accreditation decisions:

- **Accreditation granted for 7 years** if all evaluation areas are evaluated as exceptional (5 points), very good (4 points), or good (3 points).
- **Accreditation granted for 3 years** if at least one evaluation area is evaluated as satisfactory (2 points).
- **Not accredited** if at least one evaluation area is evaluated as unsatisfactory (1 point).

If the field of study and cycle were **previously accredited for 3 years**, the re-evaluation of the field of study and cycle is initiated no earlier than after 2 years. After the re-evaluation of the field of study and cycle, SKVC takes one of the following decisions regarding the accreditation of the field of study and cycle:

- To be accredited for the remaining term until the next evaluation of the field of study and cycle, but no longer than 4 years, if all evaluation areas are evaluated as exceptional (5 points), very good (4 points) or good (3 points).
- To not be accredited, if at least one evaluation area is evaluated as satisfactory (2 points) or unsatisfactory (1 point).

1.2. REVIEW PANEL

The review panel was appointed in accordance with the Reviewer Selection Procedure as approved by the Director of SKVC.

The composition of the review panel was as follows:

1. Panel chair: Prof. dr. Jasmina Casals-Terré, Professor at Technical University of Catalonia-Barcelona Tech Mechanical Engineering Department, Spain;
2. Academic member: Associate professor dr. Tadej Petri, Associate professor at Jožef Stefan International Postgraduate School (MPŠ) and senior research associate in the Department of Automation, Biocybernetics and Robotics, Ljubljana, Slovenia;
3. Academic member: Prof. dr. Tavo Kangru, Professor at Tallinn University of Applied Sciences TTK, Institute of Technology, Estonia;
4. Social partner representative: Dr. Vaidas Liesionis General director of the Closed Limited Company (UAB) Machinery Plant, Lithuania;
5. Student representative: Mr Matas Žalandauskas, second year student in the Renewable energy engineering study programme at Vilnius College, Lithuania.

1.3. SITE VISIT

The site visit was organised on 12th November 2024 onsite.

Meetings with the following members of the staff and stakeholders took place during the site visit:

- Senior management and administrative staff of the faculty;
- Team responsible for the preparation of the SER;
- Teaching staff;
- Students;
- Alumni and social stakeholders, including employers.

There was no need for translation, and the meetings were conducted in English.

1.4. BACKGROUND OF THE REVIEW

Overview of the HEI

Klaipeda University (hereafter – KU) was established on 1st January 1991. It offers academic studies in humanities, social, physical, biomedical and technological fields. KU has 58 undergraduate programmes, one special professional study programme, 57 graduate study programmes, and 10 post-graduate study programmes (including one in the study field of Ecology).

Overview of the study field

The Study Programme of Production Engineering is implemented by the Department of Engineering in the Faculty of Marine Technology and Natural Science. The Department of Engineering consists of the following subdivisions: about 20 research and training laboratories, specialised offices and training workshops.

The Department of Engineering (DE) implements six 1st and 2nd cycle study programmes in engineering. DE offers 1st cycle study programmes - Chemical Engineering (Environment and Energy), Electrical Engineering and Mechanical Engineering. DE carries out the 2nd cycle study programmes - Innovative Electrical and Automation Systems, Production Engineering, and Innovative Processes Engineering. The graduates of the Master programmes of DE can enter the Joint International Doctoral Programme in Transport Engineering supervised by KU or enter Electrical and Electronics Engineering PhD programmes in Kaunas University of Technology, Vilnius Tech University or other universities in EU-Conexus network or other abroad countries.

Previous external evaluations

In 2017, an external evaluation of the ME study programme was conducted by an International Group of Experts on behalf of the Lithuanian Centre for Quality Assessment in Higher Education (SKVC). As a result, the study programme was accredited, and some recommendations for improvement were made.

Improving the link between study outcomes and individual subjects and ensuring that the curriculum covers all the skills students need, such as English and presentation skills. The study results were adjusted to individual subjects, taking into account the new requirements formulated in the descriptor of the Study Field of Engineering.

- Encourage students to deepen their knowledge of the English language by making it mandatory for them to prepare several presentations in English during the study programme tasks were included to develop these abilities among the students.
- Make the subject Production Management, which is currently optional, a compulsory subject. Revise the course content to ensure that students are introduced to modern Digital Industry concepts and widely used terms and their applications, such as „concurrent engineering “, „4th Industrial Revolution (Industry 4.0) “, „Data security”, and „Smart industry“, etc. Production Management is now a compulsory subject. A specialisation itinerary regarding Digitalization production is now available covering the required contents.
- During the visit to the University, employers and graduates expressed their desire to improve the computer programming skills of the study programme graduates. The compulsory subject Automated Manufacturing Control Systems includes PLC programming. Efforts should be made to increase the practical use of computer programming in study subjects. The content of Automatic Manufacturing Control Systems was upgraded. There were no requirements in this direction in the current visit.

- To promote the internationalisation of the study programme by accepting more students from other countries. Since 2018, admission of foreign students has been ongoing. During the review meeting, one international student was present.

Documents and information used in the review

The following documents and/or information have been provided by the HEI before or during the site visit:

- Self-evaluation report and its annexes
- Final theses

Additional sources of information used by the review panel:

The following additional sources of information have been used by the review panel:

- The website

II. STUDY PROGRAMMES IN THE FIELD

Second cycle/LTQF 7

Title of the study programme	**Production Engineering**
State code	6211EX063
Type of study (college/university)	University
Mode of study (full time/part time) and nominal duration (in years)	Full-time (2 years)
Workload in ECTS	120
Award (degree and/or professional qualification)	Master of Engineering Science
Language of instruction	Lithuanian English
Admission requirements	The following persons can participate in the competition for masters studies: 1) having a university bachelor's degree in engineering sciences, technological sciences study groups; 2) possessing a university bachelor's degree from other groups of study fields and at least one year of work experience in the chosen master's study field; 3) after completing relevant additional studies; 4) having completed higher education collegiate studies in engineering sciences, informatics sciences, technological sciences study groups, if the competitive score is not less than 8.5.
First registration date	19-05-1997
Comments (including remarks on joint or interdisciplinary nature of the programme, mode of provision)	

III. ASSESSMENT IN POINTS BY CYCLE AND EVALUATION AREAS

The **second cycle** of the Production and Manufacturing Engineering field of study is given a **positive** evaluation.

No.	Evaluation Area	Evaluation points[1*]
1.	Study aims, learning outcomes and curriculum	3
2.	Links between scientific (or artistic) research and higher education	4
3.	Student admission and support	4
4.	Teaching and learning, student assessment, and graduate employment	4
5.	Teaching staff	4
6.	Learning facilities and resources	4
7.	Quality assurance and public information	4
	Total:	27

IV. STUDY FIELD ANALYSIS

AREA 1: STUDY AIMS, LEARNING OUTCOMES AND CURRICULUM

1.1.	Programmes are aligned with the country's economic and societal needs and the strategy of the HEI.

FACTUAL SITUATION

1.1.1. Programme aims and learning outcomes are aligned with the needs of the society and/or the labour market

The programme aims and learning outcomes conform with the manpower needs of the Klapeida region industry. They should facilitate the training of Production Engineers required to meet the labour manpower needs of the long-term strategy of the Lithuanian economy until 2030, which requires highly trained professionals for the industry in this region.

The aims and learning outcomes are defined in terms of both the academic content and professional requirements for Master level studies in Production Engineering, which conforms with the high-level

1*

1 (unsatisfactory) - the area does not meet the minimum requirements, there are substantial shortcomings that hinder the implementation of the programmes in the field.
2 (satisfactory) - the area meets the minimum requirements, but there are substantial shortcomings that need to be eliminated.
3 (good) - the area is being developed systematically, without any substantial shortcomings.
4 (very good) - the area is evaluated very well in the national context and internationally, without any shortcomings.
5 (exceptional) - the area is evaluated exceptionally well in the national context and internationally.

manpower needs of the labour market in the country and specifically in the Klapeida region as noted in SER, a 2022 survey of companies highlighted the need for production engineering specialists in SBA Furniture Group companies, JC Vakaru laivu gamykla, companies located in the Klaipeda FEZ, Philip Morris, Girigeo Kaipedos Kartonas Klaipedos baldai and many others". Not only the survey mentioned by SER, but also during the visit the social partners, employers and alumni - all corroborated the need for those specialists. There are highlights of the need for engineers to ensure development according to Industry 4.0 trends, digitalisation of production, robotisation, etc. Employers who participated in the review group meeting with alumni and stakeholders emphasised that the quality of learning is very good.

1.1.2. Programme aims and learning outcomes are aligned with the HEI's mission, goals, and strategy

The aims and learning outcomes of the field and cycle study programme are to train production engineers needed by the labour market who have a high practical professional level, capable of anchoring themselves in national and regional markets. This conforms with the general goal of KU to produce future specialists with advanced practical and applied research skills, able to perform experimental development and practice lifelong learning. In SER is noted that, the second-cycle study programme "Production Engineering" in the PE field of study aligns with the common goals of KU". These goals are ,,to develop future specialists and creative personalities based on advanced scientific research; to foster scientific activities at an international level, promoting scientific progress and the cultural education of society; to provide the highest level of scientific research and experimental development services; and to increase KU's contribution to the harmonious development of the maritime sector, the region, and the country".

ANALYSIS AND CONCLUSION (regarding 1.1.)

The high demand for Production Engineering specialists in Lithuania is noted. Hence, this programme can contribute to meeting the needs of the industry, especially in the Klapeida region. The overall study field aim perfectly aligns with the vision and mission of KU.

1.2.	Programmes comply with legal requirements, while curriculum design, curriculum, teaching/learning and assessment methods enable students to achieve study aims and learning outcomes

FACTUAL SITUATION

1.2.1. Programmes comply with legal requirements

The curriculum design meets legal requirements set by the Ministry of Education and Science for the second cycle study programme. It consists of 120 ECTS credits, all of which are directly related to PE. Thus, it fulfils the aim of preparing professionals who are able to develop the skills and knowledge required for global production engineering; high technology develops the ability to apply that knowledge and create new ones.

The study modules are divided equally between 4 semesters, with the number of study subjects not exceeding 5 courses per semester.

There is a reasonable variety of elective subjects to choose from with one particular specialisation on Digitalization of production (Systems of Integrated Manufacturing, Production Enterprises resource planning systems, Innovations strategies, Internet of things systems engineering and Cyber security in manufacturing) and general elective related to circular economy and advanced manufacturing processes (3D printing technologies and research Modern processing technologies, Sustainable energetics, reliability of engineering system, Project and quality management and principles of Personnel management methodology). The students are required to take three electives.

The regulations on the national level are well known and worked into the programme. The compliance with the general requirements is illustrated below:

Legal requirements 2nd Cycle

- Scope of the programme in ECTS 90 or 120Cr. (120 ECTS in programme);
- ECTS for studies specified by University or optional studies No more than 30 ECTS (18 ECTS in programme);
- Final work at least 30 ECTS (30 ECTS in programme);
- Contact hours no less than 10% of learning (37,5% in programme);
- Individual learning at least 50% (62,5% in programme);

SER ANNEX 1, Table 1 presents the study programme of production engineering.

1.2.2. Programme aims, learning outcomes, teaching/learning and assessment methods are aligned

In table 2 in the SER there is an appropriate mapping of the knowledge requirements and study subjects. The results of the study programme are formulated taking into account the Descriptor of the study group of Engineering Sciences (July 5, 2023, No. V-948). The master's study programme is submitted for evaluation, in which production engineering is focused on scientific engineering activities, the purpose of which is to create new production methods and tools, using known and creating new or essentially improving already developed materials, technologies, devices, processes, planning and organising production processes.

The study subjects align with the needs of the Lithuanian and EU labour market; and the learning outcomes, according to information provided during the review meeting, outlined in terms of the students' expected skills and attitudes upon graduation. However, the card modules, which contain detailed information about the learning outcomes, skills, and competencies achieved by students upon completion of each subject, are only accessible via the intranet using a student accreditation password. As a result, this information was not included in the SER or made publicly available on the website. According to the SER and discussions during the review meetings with professors and students, the subjects are delivered through a combination of lectures, laboratory work, and self-study (comprising no less than 40-50%), which is deemed appropriate for achieving the intended programme aims.

The subjects and research focus are appropriate for this level of study.

1.2.3. Curriculum ensures consistent development of student competences

The programme integrates scientific research, production engineering, and management with a focus on sustainability and digitalisation. During the first semester, the programme focuses on

foundational subjects such as scientific research, innovation, numerical modelling, and production management. Later, advanced topics in production engineering are introduced such as automation, control systems, composite technologies and management (resource planning, personnel, project, and quality management). The programme also includes sustainability, with courses covering cleaner technologies, ecological design, and the elective sustainable energy. The specialisation - "Digitalization of Production" offers electives like Integrated Production Systems, Internet of Things (IoT) Systems Engineering, and Cybersecurity.

The research focus is introduced from the first semester, combining subjects of research with the knowledge on the basics of research as well as the recent knowledge of the direction of production engineering all along the first year. The last semester is fully devoted to the Master's thesis.

1.2.4. Opportunities for students to personalise curriculum according to their personal learning goals and intended learning outcomes are ensured

The students have the opportunities to personalise the structure of their field of study programme by free choice of up to 18 credits (elective), the students can also decide on their final thesis topic 30 credits (Master's thesis), which forms 40%. This includes University study subjects (elective), final thesis, voluntary internship, and Erasums exchange. The SER notes that there is a possibility for students to individualise their studies is regulated by the KU Study Regulations (2018 edition), according to which they can go abroad on Erasmus up to 12 months, participate on voluntary internships and ask for an individual plan were adapting the list of compulsory subjects.

1.2.5. Final theses (applied projects) comply with the requirements for the field and cycle

The final thesis requirements have been regulated since 2018 by regulation for the preparation and defence of the Final Thesis at KU. SER (General Requirements for KU Students' Independent Written Works, approved by the Senate on February 6, 2020, KU Study Regulations (2018). According to Annex 2, the topics presented for 2nd cycle are all for the area of PE, most of them related to nearby industry relevant topics and are focused on research-oriented thesis.

ANALYSIS AND CONCLUSION (regarding 1.2.)

The order of the study subjects is logical, starting with foundational production engineering subjects in the first year, necessary for the student to develop further in the specialisation area. The research abilities are promoted from the very beginning, and the subjects of production engineering are taught in a logical sequence to enable the competencies to be developed in a gradual manner, also providing the necessary knowledge and skills for the final thesis work.

There is no sufficient information about learning outcomes and assessment for each module, in addition to the overall documents outlining the programme. However, after the review meeting, the students reported a good mix of teaching and learning methods to deliver the courses which are appropriate for achieving the desired leaning outcomes such as lectures, practice, laboratory work and projects.

The Master's thesis topics are relevant to the PE field, and some of them are linked to industry-related topics. The Master thesis shows a good combination of analysis, simulation and experimental work for research-oriented topics. The choice of specialisation and the electives allow to personalise the master programme according to the student's needs in a reasonable manner.

AREA 1: CONCLUSIONS

AREA 1	Unsatisfactory - 1 Does not meet the requirements	Satisfactory - 2 Meets the requirements, but there are substantial shortcomings to be eliminated	Good - 3 Meets the requirements, but there are shortcomings to be eliminated	Very good - 4 Very well nationally and internationally without any shortcomings	Exceptional - 5 Exceptionally well nationally and internationally without any shortcomings
Second cycle			X		

COMMENDATIONS

None

RECOMMENDATIONS

To address shortcomings

1. **Make available to prospective students and general public the mapping of the Curriculum to Competencies** as well as learning outcomes.

For further improvement

1. **Improve Website Information:** with detailed information for each study course regarding syllabus, learning outcomes and assessment methods.
2. **Increase collaboration with industry**. Take all opportunities to collaborate with the network of alumni and social partners that already exists.
3. **Increase knowledge on plagiarism and collective intelligence tools:** especially during the elaboration of the final thesis report.

AREA 2: LINKS BETWEEN SCIENTIFIC (OR ARTISTIC) RESEARCH AND HIGHER EDUCATION

2.1.	Higher education integrates the latest developments in scientific (or artistic) research and technology and enables students to develop skills for scientific (or artistic) research

FACTUAL SITUATION

2.1.1. Research within the field of study is at a sufficient level

KU has established a strong integration of scientific research within its Production Engineering programme, with faculty actively engaged in high-level research projects often conducted in collaboration with industry partners. Research efforts focus on key areas such as advanced materials, sustainable technologies, and digital manufacturing, aligning closely with academic and industry trends to ensure the curriculum remains relevant to contemporary technological advancements. The programme has been positively evaluated by external experts, who highlighted its production of high-impact research outcomes and internationally recognised publications in mechanical and production engineering. KU's active participation in the EU-CONEXUS network further enhances research opportunities, fostering cross-institutional collaboration and supporting initiatives in sustainable engineering and the blue economy. These research activities, recognized

for their quality both nationally and internationally, address regional economic needs by tackling industry-relevant challenges like composite materials development and eco-friendly manufacturing practices, underscoring KU's strength in applied and theoretical research.

2.1.2. Curriculum is linked to the latest developments in science, art, and technology

The curriculum integrates the latest scientific and technological advances by embedding recent research findings into coursework. Topics such as 3D printing, circular economy principles, and sustainable materials are covered, reflecting current industry standards and technological progress. This integration ensures that students receive an education that is both relevant to their future careers and reflective of KU's research priorities in sustainable production and advanced materials.

2.1.3. Opportunities for students to engage in research are consistent with the cycle

KU provides numerous opportunities for students to engage in research activities, integrating them into various projects, such as those addressing sustainable engineering and advanced manufacturing practices. Students actively participate in scientific initiatives under faculty guidance, often collaborating with industry partners, which helps them develop practical skills and knowledge. They are encouraged to present their research at national and international conferences, such as the University-organized "Sea and Coastal Research" conference, and participate in competitions, including the development of pneumomobile models and sustainable manufacturing prototypes. Additionally, KU supports student research by offering free and remote access to a wide array of scientific databases via the University library, facilitating independent and innovative exploration of global research trends. The University's commitment to student involvement is also evident in interdisciplinary projects, such as the development of composite materials for electric buses and research on resource-saving technologies based on circular economy principles, which prepare students for impactful careers in engineering.

ANALYSIS AND CONCLUSION (regarding 2.1.)

KU Production Engineering programme integrates research into its academic framework, aligning with technological advancements and industry needs. Faculty actively contribute to high-level projects and publish internationally recognised research, fostering an innovative academic environment. Through partnerships like the EU-CONEXUS network, the programme expands cross-institutional collaboration and research opportunities. Student engagement is a key strength, with access to project-based learning, industry internships, and participation in conferences. Initiatives such as pneumomobile development and sustainable engineering prototypes, alongside access to scientific databases, enable students to gain practical experience and explore global research trends, furthering their involvement in interdisciplinary projects on sustainability and circular economy principles.

The programme demonstrates strong alignment with sustainable development goals and innovative manufacturing practices, addressing both local and global economic demands. Faculty contributions to applied and theoretical research, combined with productive industry partnerships, highlight the programme's relevance. However, despite these achievements, the programme could further elevate its profile by pursuing groundbreaking or highly innovative research initiatives that distinguish it from peers. Additionally, while the current integration of research is robust, clearer articulation of

financial sustainability strategies for research activities would enhance long-term planning and impact.

KU's Production Engineering programme is well-positioned both nationally and internationally, successfully meeting its aim of integrating research into education. The programme effectively supports the development of both faculty and students, ensuring relevance to industry standards and academic excellence. However, the absence of distinctive research initiatives and limited clarity on financial sustainability indicates areas for improvement. The programme meets its objectives effectively and maintains a strong alignment with industry needs and sustainable development trends. To achieve a higher distinction, it should emphasise innovative, high-impact research and enhance its approach to financial sustainability in research.

AREA 2: CONCLUSIONS

AREA 2	Unsatisfactory - 1 Does not meet the requirements	Satisfactory - 2 Meets the requirements, but there are substantial shortcomings to be eliminated	Good - 3 Meets the requirements, but there are shortcomings to be eliminated	Very good - 4 Very well nationally and internationally without any shortcomings	Exceptional - 5 Exceptionally well nationally and internationally without any shortcomings
Second cycle				x	

COMMENDATIONS

1. Participation in EU-CONEXUS partnerships programmes.

RECOMMENDATIONS

To address shortcomings

None

For further improvement

1. **Expand Student Access to International Research Opportunities:** While KU's partnership with EU-CONEXUS is an asset, further enhancing international research opportunities for students could provide additional value.
2. **Increase Visibility of Research Achievements:** To boost the University's profile, KU could benefit from more active dissemination of its research outcomes.

AREA 3: STUDENT ADMISSION AND SUPPORT

3.1.	Student selection and admission is in line with the learning outcomes

FACTUAL SITUATION

3.1.1. Student selection and admission criteria and procedures are adequate and transparent

Student selection and admission criteria and procedures are adequate and transparent. Student selection and admission criteria and procedures are appropriate. Applications are submitted on their official University website. The website is easy to navigate, and all information is also listed and fully accessible to everyone. In 2021, a total of 15 students applied for Master degree full-time studies, in 2022 - 10, in 2023 - 10 with an admissions competition score being: in 2021, highest - 10,38; lowest 6,32; average - 8,21; in 2022, highest - 9,88; lowest 8,85; average - 9,16; in 2023, highest - 10,29; lowest 6,96; average - 8,81; The number of agreements signed: 2021 - 11 state supported, 2

unsupported; 2022 - 5 state supported, 0 unsupported; 2023 - 7 state supported, 1 unsupported. The drop-out rates are not listed in the SER.

3.1.2. Recognition of foreign qualifications, periods of study, and prior learning (established provisions and procedures)

Recognition of foreign qualifications, periods of study and prior learning are adequate, effective and transparent. Between 2021 and 2023, four foreign students successfully completed their studies at Klaipeda University. During this period, nine individuals from foreign countries expressed their intent to study at KU as a first priority, and three were accepted. According to the SER, the inability of some foreign students to pursue their studies was attributed to external factors. For instance, Klaipeda University did not receive necessary feedback from the universities where these students had graduated, preventing KU from verifying the issuance of their diplomas. Additionally, KU has implemented stricter visa issuance procedures to address this issue. As per the SER, students who have been enrolled in the same or another higher education institution, either domestically or abroad, are eligible to have their prior learning recognised. To receive accreditation for their achievements, applicants must submit relevant documentation, such as a diploma or its supplement. The Head of the Department assesses whether the volume of the completed studies constitutes at least two-thirds of the scope of comparable fundamental studies and aligns with the primary objectives and core content of those subjects. Additionally, the total volume of non-university study credits that may be transferred should not exceed half of the volume of the main university study programme.

ANALYSIS AND CONCLUSION (regarding 3.1.)

Klaipeda University's selection and admission processes are transparent and adequate. Applications are submitted via an easy-to-navigate official website. Comprehensive information on admissions is accessible to all. Recognition processes for foreign qualifications and prior learning are effective and transparent. From 2021 to 2023, four foreign students completed their studies at KU, with three out of nine applicants being accepted. Challenges include verifying diplomas due to lack of feedback from previous institutions and stricter visa issuance procedures. KU recognises prior learning for students from domestic and foreign institutions. Accreditation requires documentation such as a diploma or its supplement. The Head of the Department ensures that prior studies cover at least two-thirds of the comparable KU programme and that non-university credits do not exceed half of the programme’s volume. Klaipeda University demonstrates transparent and effective admission and recognition processes.

3.2.	There is an effective student support system enabling students to maximise their learning progress

FACTUAL SITUATION

3.2.1. Opportunities for student academic mobility are ensured

KU ensures opportunities for student mobility through the Erasmus+ programme. Before signing contracts, KU evaluates foreign universities to ensure their study programmes align with the subjects taught at KU. Additionally, KU consults with specific faculties and departments to provide the most favourable conditions for students wishing to study abroad. Currently, KU has signed 300 cooperation agreements across various fields of study approval. According to the SER, two master’s students of the PE program went for the Erasmus+ internship in 2021, about 10 percent from all

those who studied in 2021-2023. Each selected student is informed individually about their selection results. Furthermore, the self-evaluation report indicates that state-funded students often worry about losing their funding due to potentially lower grades while studying in English. Moreover, student participation in study-abroad programmes is limited as many students start working during their studies and are reluctant to interrupt their employment. To quit their jobs for an entire semester. After visiting the University, it is confirmed that students don't want to go study abroad because they already have jobs. However, it is strongly recommended that KU should motivate students to study abroad for short periods of time.

3.2.2. Academic, financial, social, psychological, and personal support provided to students is relevant, adequate, and effective

KU offers comprehensive, effective and adequate academic, financial, social, psychological, and personal support to its students. 20 scholarships awarded to Production Engineering master's students from 2021-2024. 1 Production Engineering master's student received social support in 2023-2024. Lecturers provide consultations on homework, individual or group assignments, and other study-related issues during assigned hours. These consultations are available both in-person at officially announced times and through the virtual learning environment, Moodle. Additionally, various electronic platforms such as Zoom, Teams, email, discussion forums, and other tools convenient for both teachers and students are utilised. The report indicates that, when necessary, individual study opportunities are provided according to personalised study schedules. Easily accessible and timely information about studies, activities, and other relevant matters are available on the KU website. Students receive career advice during lectures, and meetings with alumni and potential employers are organised. Students are also invited to thesis defences and student conferences, which aid their future career prospects. Students are encouraged to engage in the University community and participate in events, social actions, and volunteer opportunities outside the University. They also have the chance to join various student organisations. Regarding financial support, students enrolled in major study programmes, like all KU students, can apply for incentive, social, or one-time scholarships. Personal support is facilitated through dormitory student self-governments, which represent their interests. However, none of the students currently live in dormitories. KU promotes student participation in scientific conferences, seminars, and other academic, cultural, and sports events, which is confirmed after the visit. First-cycle students who present at scientific conferences receive additional points when applying for second-cycle studies. KU provides psychological counselling and spiritual care services for both students and other members of the University community. Individual psychological consultations are provided to all by pre-registration. After the visit, it is confirmed that students get enough support from the teaching staff and administration in order to prosper while studying.

3.2.3. Higher education information and student counselling are sufficient.

Higher education information and student counselling are adequate. KU provides easily accessible and timely information about higher education, studies, activities, and other relevant matters through its website. Information about studies is disseminated via various communication channels and methods. Lecturers, during their designated working hours, offer support to students through live consultations or electronic platforms, addressing any issues that may arise, also 44 University employees participated in training on student health challenges in 2022. Library specialists provide guidance on information retrieval, database usage, and library resources training. Students have access to electronic scientific databases and journals, and they can also utilise the resources of the

KU library and the city public library. Furthermore, students are encouraged to independently participate in information literacy training or seminars organised by KU or other institutions.

ANALYSIS AND CONCLUSION (regarding 3.2.)

KU ensures opportunities for student mobility through the Erasmus+ programme, with 300 cooperation agreements in various fields. Selection results are individually communicated to students. Despite benefits, student participation is low due to employment commitments and concerns about losing state funding. It is recommended that students be motivated to pursue short-term study abroad opportunities. KU provides academic, financial, social, psychological, and personal support. Consultations are available both in-person and online through platforms like Moodle, Zoom, and Teams. Information about studies and activities is accessible via the KU website. Career advice, meetings with alumni, and participation in thesis defences and student conferences are organised. Financial support includes incentive, social, and one-time scholarships. 20 scholarships awarded to Production Engineering master's students from 2021-2024. 1 Production Engineering master's student received social support in 2023-2024. 44 University employees participated in training on student health challenges in 2022. Students have opportunities to engage in University events, social actions, and student organisations. Psychological counselling and spiritual care services are available. KU ensures accessible and timely information about higher education through its website and various communication channels. Lecturers provide support during designated hours, both in-person and online. Library specialists offer training on information retrieval and database usage. Students have access to electronic scientific databases, journals, and library resources.

KU excels in providing opportunities for academic mobility and comprehensive student support. However, there is a need to motivate students to participate in study abroad programmes, particularly for short-term opportunities. Ensuring accessible information and effective support services contributes to student success and development at KU.

AREA 3: CONCLUSIONS

AREA 3	Unsatisfactory - 1 Does not meet the requirements	Satisfactory - 2 Meets the requirements, but there are substantial shortcomings to be eliminated	Good - 3 Meets the requirements, but there are shortcomings to be eliminated	Very good - 4 Very well nationally and internationally without any shortcomings	Exceptional - 5 Exceptionally well nationally and internationally without any shortcomings
Second cycle				x	

COMMENDATIONS

None

RECOMMENDATIONS

To address shortcomings

None

For further improvement

1. **Increase student motivation to study abroad.** When they are unable to go for long-term, they should be motivated to study for short-term studies.

AREA 4: TEACHING AND LEARNING, STUDENT ASSESSMENT, AND GRADUATE EMPLOYMENT

4.1.	Students are prepared for independent professional activity

FACTUAL SITUATION

4.1.1. Teaching and learning address the needs of students and enable them to achieve intended learning outcomes

The structure and content of the Production Engineering study programme are sufficient to successfully acquire the desired learning outcomes. Students have the opportunity to direct and individualise their curriculum by choosing the electives that are most suitable and help to achieve the desired learning outcomes. A well-functioning feedback system has been implemented in the study programme ensuring systematic updating of the programme by involving all parties. Social partners interact with the university rather informally and project-based but evaluate the learning programme as being up to date.

Various learning methods are used, including traditional such as lectures, exercises, team projects, group work, individual work, individual projects, analysis of a scientific paper, oral presentation, literature analysis, laboratory work, case studies, practice reports, discussions, seminars, control work, and the latest interactive methods, such as distance learning using the VLE Moodle capabilities. The broad scope of the methods is sufficient to achieve the learning outcomes. Existing laboratories and technology classrooms are equipped with the necessary equipment. Laboratory space is used for research and is open to students for their projects.

The evaluation process is based on principles of clarity, reasonableness, objectivity, publicity of the assessment criteria, and mutual respect and confidentiality. Different assessment methods are used to test knowledge, evaluate a problem-solving report, assess skills demonstrated in the laboratory, assess the performance of practical tasks, perform case studies, assess the ability to collect and analyse data and assess internship and project reports.

Students who complete the Production Engineering study programme can continue their education to third-level studies in the field of technological sciences. Three students have finished third-level studies

4.1.2. Access to higher education for socially vulnerable groups and students with individual needs is ensured.

KU takes measures to ensure access to higher education for socially vulnerable groups and students with special needs. Various initiatives and adaptations are in place to support these students throughout their academic journey. For example, students with special needs, if necessary, are consulted remotely using modern video tools, educational materials are placed in a virtual environment, and the new buildings of the KU campus are adapted to those who are socially vulnerable. These adaptations ensure that all students, regardless of their physical abilities, have the opportunity to participate fully in University life and achieve their academic goals. Library departments provide readers with individual needs the opportunity to use special programmes in the reading rooms. Also, the KU premises are accessible and adapted to people with physical

disabilities. There were no students with such needs, and the SER does not specify anything about students that are socially vulnerable.

ANALYSIS AND CONCLUSION (regarding 4.1.)

KU has created sufficient prerequisites and opportunities for students to acquire the necessary learning outcomes. The study programme is balanced, covering theoretical topics and practical skills necessary to fulfil the learning outcomes.

Different learning methods are used in the study courses, varying them based on the needs of the lecturer and the subjects. The existing laboratories are in use and equipped with the necessary technological capabilities, assuring necessary learning outcomes. The assessment system is clear and reasonable, and no shortcomings in its functioning were identified.

KU takes measures to ensure access to higher education for socially vulnerable groups and students with special needs throughout their academic journey.

4.2.	There is an effective and transparent system for student assessment, progress monitoring, and assuring academic integrity

FACTUAL SITUATION

4.2.1. Monitoring of learning progress and feedback to students to promote self-assessment and learning progress planning is systematic

The student progress and feedback system are described in the KU Description of the procedure for organising study feedback at Klaipeda University. Students' progress is analysed on a semester-by-semester basis at the subject, course, and study programme levels, and the feedback results are discussed, if necessary, with lecturers who taught the relevant subjects, to KU Student Union, the Study Service, the Departments of Science and Innovation, Communication and Marketing and/or other departments of the University. Once every three years, graduate surveys are organised at KU. The feedback results are made available to the necessary parties and published on the KU website.

At the beginning of each course, the implemented system is introduced to students together with a course description, assessment system, and assessment criteria. The lecturer provides continuous feedback throughout the course. The interim assessment results are systematically entered into the electronic information space.

The student progress and feedback system are systematic and ensures sufficient feedback to the student to promote self-assessment.

4.2.2. Graduate employability and career are monitored

KU graduates' employability is good. This has been proved by students (many of them are working), alumni and employers. However, some broader descriptions of historical employment data would be expected in SER. Also, the career monitoring system is not well described in SER, but there are some links to the ISO 9001 quality management system, so experts expect it to be described and formalised in some procedures. However, we would suggest and encourage to make the career monitoring system more clearly and accessible for present and future students as well as to make historical employability data accessible to present and future students. This would serve as a good tool for study field marketing as local industry representatives expect the number of incoming

students to be higher. Having such good employability data looks logical to publish in order to show it to external people (future and present students, employers and probably teachers).

Experts would like to suggest to prepare and process employability data from various perspectives, like the percentage of graduates employed per position occupied, per industry where graduates are employed, per time needed to be employed after being graduated and so on.

4.2.3. Policies to ensure academic integrity, tolerance, and non-discrimination are implemented

KU has implemented various policies and measures for both students and academic staff, the principles and standards of which are outlined in the KU Code of Academic Ethics to ensure academic honesty, tolerance, and non-discrimination in both directions.

Although KU pays great attention to preventing plagiarism and inappropriate use of information sources, technology has rapidly developed in this area in recent years, sometimes making it difficult for both academic staff and the student body to make the correct decision. Consequently, it is necessary to constantly review this topic and implement new measures when necessary.

4.2.4. Procedures for submitting and processing appeals and complaints are effective

KU has developed a clear and straightforward process for receiving and handling appeals regarding the study course and the thesis framework. The process is stated in the KU study regulations, chapter "Appeal Procedure." It has been introduced to both the student body and academic staff. Students can request an assessment from the KU Academic Ethics Committee if they suspect a violation of the academic ethics code. There were no registered cases during the period under review.

ANALYSIS AND CONCLUSION (regarding 4.2.)

KU has implemented a system to monitor student learning progress and provide feedback. The system's principles and scope have been communicated to all parties, and they have been instructed to use it. The accumulated data is analysed at several levels, and proposals for mitigation actions are developed.

Providing feedback is part of the teaching staff's daily work and is carried through on an ongoing basis. Students generally provide minimal feedback, and at this point, it would be reasonable to increase this to some extent by explaining the need for feedback to the students.

The KU has implemented various activities and measures for both the student body and the academic staff to ensure academic integrity, tolerance and non-discrimination in both directions. A clear and understandable process is in place for receiving and handling appeals and complaints both within the framework of the course and the final thesis. As proven by students, alumni, and employers, KU graduates' employability is good.

AREA 4: CONCLUSIONS

AREA 4	Unsatisfactory - 1 Does not meet the requirements	Satisfactory - 2 Meets the requirements, but there are substantial shortcomings to be eliminated	Good - 3 Meets the requirements, but there are shortcomings to be eliminated	Very good - 4 Very well nationally and internationally without any shortcomings	Exceptional - 5 Exceptionally well nationally and internationally without any shortcomings
Second cycle				x	

COMMENDATIONS

None

RECOMMENDATIONS

To address shortcomings

None

For further improvement

1. **Increase Student Motivation to provide Feedback.** Students generally provide minimal feedback, but feedback is important for improving processes. Explain and involve students in using the feedback system more widely.

2. **Increase Student Motivation on Research.** Students would like to participate more in research and development activities. If possible, involve more students in R&D.

3. **Increase Plagiarism Awarness and novel AI tools.** Although KU pays great attention to preventing plagiarism and inappropriate use of information sources, technology has rapidly developed in this area in recent years, sometimes making it difficult for both academic staff and the student body to make the correct decision. Consequently, it is necessary to constantly review this topic and implement new measures when necessary.
4. **Increase Visibility of Employability Data**. Historical employability data should be accessible for present and future students.

AREA 5: TEACHING STAFF

5.1.	Teaching staff is adequate to achieve learning outcomes

FACTUAL SITUATION

5.1.1. The number, qualification, and competence (scientific, didactic, professional) of teaching staff is sufficient to achieve learning outcomes

Currently, the academic staff of Production Engineering consists of 18 members: six professors, eleven associate professors, and one lecturer with a scientific degree. The workload varies among teaching staff, but the majority of teachers' workload is above 0.5. The age distribution of the teaching staff is even across age groups, ensuring a diverse approach and the best results. A large part of the teaching staff has long-term experience in the topics taught, as well as theoretical and practical work experience in the study field, and some teaching staff are also currently practising as specialists in enterprises. Academic staff members actively participate in scientific conferences and various training sessions, involve students in conducting applied research, attracting external funding, and

supervising long-running student projects, such as the “Pneumobile”. Measures have also been implemented to attract new teachers and researchers, such as support for young teachers, a post-doctoral internship programme and balancing the workload between research and teaching.

Academic staff's employment contracts are for five years. After each five-year cycle, an attestation (certification) is carried out to determine the compliance of the staff's research and pedagogical qualifications. Attestation is carried out in accordance with “Description of the procedure for attestation and competition for the positions of Klaipėda University lecturers, research workers, researchers, heads of departments, directors of research institutes, faculty deans”. The main criteria for the assessment are participation in conferences, the number of published scientific articles, conducting research projects, compiling methodological material, supervising research, and other related research.

ANALYSIS AND CONCLUSION (regarding 5.1.)

There are sufficient qualified lecturers, associate professors, and professors to teach the study programme successfully. In addition to academic competence, academic staff also have practical experience working as scientists and practising as specialists in enterprises. Applied research is conducted, students are involved in the process, and the results are to be used to illustrate study course materials. An academic staff attestation system has been implemented, and it is sustainable.

5.2.	Teaching staff is ensured opportunities to develop competences, and they are periodically evaluated

FACTUAL SITUATION

5.2.1. Opportunities for academic mobility of teaching staff are ensured

KU academic staff have several opportunities to participate in international programmes, such as ERASMUS+ and mobility funding from Klaipeda University's Science and Study Promotion Fund. The rules and requirements for long-term and short-term participation are public and listed in the Approval of the Regulations for the Improvement of Qualifications of Pedagogical and Scientific Staff at Klaipeda University. The main objectives of mobility programmes are to teach, participate in training, and do internships at other higher education institutions or business enterprises. Many such foreign visits have taken place in recent years. It is stated in SER that seven members of the teaching staff participated in the outgoing mobility programme, and six lecturers visited the KU for teaching assignments and training internships. In addition to mobility visits, KU academic staff participates in several international projects. The EU-CONEXUS Smart Campus is being developed by the ERASMUS+ project "European University for Smart Coastal Cities Development". It will encompass joint bachelor's, master's, and doctoral study programmes, collaborative research programmes, modern pedagogical technologies, and sports and cultural events. EU-CONEXUS “Research for Society”, aimed at fundamentally transforming the Alliance's scientific activities.

5.2.2. Opportunities for the development of the teaching staff are ensured

Academic staff have several opportunities for professional development, taking part in courses, seminars, applied research, and participating in international projects and expert groups. KU provides funding for dissertation defences, textbook and monograph preparation, internship and professional development course costs. In addition, lecturers can be exempted from teaching duties for up to one year every five years to conduct scientific research and improve their scientific or pedagogical qualifications.

KU has conducted internal training to improve didactic and research competencies. The topics of internal training are selected according to the general training needs of academic staff. Over 80 cases of teaching staff's participation in professional and pedagogical courses and training internships abroad under the Erasmus+ exchange program or supported by Study Promotion Fund over the past three years, noted in the SER.

ANALYSIS AND CONCLUSION (regarding 5.2.)

Sufficient opportunities have been created for teaching staff to develop their competencies further. The KU has conducted training to increase didactic and research competencies. Opportunities have been created to participate in international programmes and projects. A period with support measures has been created for young or starting teaching staff. One possibility could be to involve more academic staff in international projects, which in turn would help expand students' knowledge.

AREA 5: CONCLUSIONS

AREA 5	Unsatisfactory - 1 Does not meet the requirements	Satisfactory - 2 Meets the requirements, but there are substantial shortcomings to be eliminated	Good - 3 Meets the requirements, but there are shortcomings to be eliminated	Very good - 4 Very well nationally and internationally without any shortcomings	Exceptional - 5 Exceptionally well nationally and internationally without any shortcomings
Second cycle				x	

COMMENDATIONS

None

RECOMMENDATIONS

To address shortcomings

None

For further improvement

1. **Increase Lectures from Industry Experts:** Teaching staff could include company specialists or practitioners in their lectures. Students would like more frequent interaction with external experts.
2. **Further Improvement of Teaching Staff development**: The teaching staff is guaranteed excellent opportunities for study, R&D and career development.

AREA 6: LEARNING FACILITIES AND RESOURCES

6.1.	Facilities, informational and financial resources are sufficient and enable achieving learning outcomes

FACTUAL SITUATION

6.1.1. Facilities, informational and financial resources are adequate and sufficient for an effective learning process

The facilities, informational, and financial resources at KU are well-structured to support an effective learning process. Specialised laboratories, such as those for General Chemistry, Physics, Materials Science, and Electrical Engineering, provide students with practical, hands-on experience through advanced tools and purpose-designed workstations. Modern auditoriums complement these resources, offering conducive environments for instruction and collaboration. KU's library houses over 320,000 documents and provides remote access to licensed databases via EZproxy, facilitating comprehensive academic research. Updates to the library, including specialised software and adaptive equipment, reflect KU's commitment to accessibility and inclusivity for students with disabilities.

KU's partnerships with business institutions enable the provision of internship opportunities that allow students to gain valuable practical experience aligned with their studies. These placements strengthen the link between academic learning and industry requirements. The library's resources, both physical and online, are regularly updated in collaboration with academic departments, ensuring their continued relevance to current academic and technological advancements. These elements collectively demonstrate KU's dedication to maintaining a robust and inclusive infrastructure for effective learning.

6.1.2. There is continuous planning for and upgrading of resources.

There is continuous planning for and upgrading of resources at KU, demonstrated through recent infrastructure expansions. The Marine Research Institute provides advanced laboratory spaces suited for teaching and research in marine and environmental sciences. The STEAM Center, opened in 2024, features four specialized laboratories. Additionally, the "Laboratories and Medical Simulation Center," currently under development, is scheduled for completion by 2025 and will include modern simulation and laboratory facilities. Regular updates to the library's resources are coordinated closely with academic departments, ensuring alignment with evolving academic requirements and technological advancements.

ANALYSIS AND CONCLUSION (regarding 6.1.)

KU's facilities, resources, and infrastructure meet the needs of the Production Engineering program, with particular strengths in laboratory resources and library accessibility. The institution's commitment to continuous improvement, as seen in resource planning and the establishment of updated labs, supports KU's objective of offering high-quality education. The adaptation of facilities for students with disabilities further underscores KU's inclusive approach, ensuring equitable access to education.

In conclusion, KU's facilities, informational, and financial resources are adequate and contribute positively to achieving learning outcomes in the Production Engineering program. The aim is fully met, and the infrastructure effectively supports KU's educational mission.

AREA 6: CONCLUSIONS

AREA 6	Unsatisfactory - 1 Does not meet the requirements	Satisfactory - 2 Meets the requirements, but there are substantial shortcomings to be eliminated	Good - 3 Meets the requirements, but there are shortcomings to be eliminated	Very good - 4 Very well nationally and internationally without any shortcomings	Exceptional - 5 Exceptionally well nationally and internationally without any shortcomings
Second cycle				x	

COMMENDATIONS

1. **Comprehensive Laboratory Facilities:** KU provides well-equipped laboratories across various domains relevant to the Production Engineering curriculum, such as General Chemistry, Physics, and Materials Science.

RECOMMENDATIONS

To address shortcomings

None

For further improvement

1. **Establish more international partnerships for resource sharing:** KU could benefit from formal resource-sharing arrangements with international institutions.
2. **Formalize long-term resource development plans with student input:** KU has shown a commitment to updating facilities, yet involving students in the planning process may highlight specific resource needs that the administration may overlook.

AREA 7: QUALITY ASSURANCE AND PUBLIC INFORMATION

7.1.	The development of the field of study is based on an internal quality assurance system involving all stakeholders and continuous monitoring, transparency and public information

FACTUAL SITUATION

7.1.1. Internal quality assurance system for the programmes is effective

The management and quality assurance of the Production Engineering study programme at KU follow a structured and collaborative approach, aligned with institutional regulations and European higher education standards:

- The vice-rector of studies, supported by the Study Service, oversees programme management and quality assurance. The Study Field Committee (SFC) supervises the programme, involving students and social partners, and collaborates with the Senate and Department of Engineering.
- The SFC evaluates and updates study programmes, with proposals approved by the Faculty Council, Vice-Rector, Rector, and Senate. The Department of Engineering ensures proper implementation, supported by the programme head.

- KU employs an Academic Information System and document exchange application for effective programme monitoring and improvement. Data on mobility, student performance, and dropouts inform programme enhancements.
- KU complies with ISO 9001:2015 quality management standards, using detailed processes for study preparation, implementation, and evaluation.
- Internal evaluations are conducted annually, guided by EU policies (e.g., Bologna Declaration) and Lithuanian higher education laws.

The study programmes at KU are continuously reviewed and updated to maintain quality and relevance. Programmes are reviewed annually and attested every three years by the Study Fields Committees (SFC). Study subjects are attested for 1–3 years and re-attested upon expiry. Updates or changes to programmes or specialisations are initiated by the SFC, evaluated by the Vice-Rector, Rectorate, and Senate, and aligned with regulatory documents. The Programme is compared with the latest scientific achievements and comparable programmes locally and internationally. Teachers update study subjects and participate in attestation processes. Students provide feedback via semester surveys, evaluating subjects, teaching quality, and their overall learning experience. Departments meet twice per semester and hold annual reviews to assess learning outcomes, final theses, and programme quality. Student surveys and departmental discussions inform programme adjustments and improvements. The SER stated that in June 2022, KU adopted a new quality assurance procedure for its study programmes with a focus on annual Internal Analysis, conducted to address organisational issues, introduce innovations, and enhance study quality.

7.1.2. Involvement of stakeholders (students and others) in internal quality assurance is effective

Students, teachers, and social stakeholders, including industrial partners, are involved in developing and improving the study programme. Close collaboration with manufacturing companies helps identify necessary professional skills, assess student preparation, and guide curriculum updates to meet industry demands, ensuring relevant and high-quality training.

During the review meeting, it was stated that close participation was ensured during the strategic plan development inviting social partners in the meetings with the consulting company. Moreover, the social partners noted that they are regularly invited to participate in the Master thesis committees, as well as to gather topics for the Master thesis. Besides internal quality assurance procedures, there are informal contacts that also gather information about the study programme.

7.1.3. Information on the programmes, their external evaluation, improvement processes, and outcomes is collected, used and made publicly available

Various methods are used for the collection of information on studies, e.g. questionnaires completed by students, surveys of graduates and employers, participation of employers in final theses defence etc. The collected data is then analysed to determine the improvements that are needed. Teachers submit improved study programmes for evaluation and approval by SPC and the head of the Department, who then submit their suggestions. Finally, the Dean and programme coordinator makes the decisions.

7.1.4. Student feedback is collected and analysed

Students are represented in the study field committee and the Senate. They provide suggestions for improving the quality of the study programme in terms of study content to meet job market needs and teaching methods. Besides the internal assurance quality of studies, students provide feedback via semester surveys, evaluating subjects, teaching quality, and their overall learning experience.

ANALYSIS AND CONCLUSION (regarding 7.1.)

Programme management is very well described in the SER. The University system for internal assurance of the quality of studies is based on ISO 9001:2015. There are several levels of decision-making. The major responsibility for the quality of the programme is assumed by the Study Field committee (which includes elected student members and representatives of social partners). The responsibilities for the implementation and monitoring of the quality of the programme are clearly allocated. The management and quality assurance system that was put in place is working. However, it needs to be made clear where the information is published.

According to the review meeting, both students and industrial partners were actively involved in the improvement of the programme, and their demands were addressed.

AREA 7: CONCLUSIONS

AREA 7	Unsatisfactory - 1 Does not meet the requirements	Satisfactory - 2 Meets the requirements, but there are substantial shortcomings to be eliminated	Good - 3 Meets the requirements, but there are shortcomings to be eliminated	Very good - 4 Very well nationally and internationally without any shortcomings	Exceptional - 5 Exceptionally well nationally and internationally without any shortcomings
Second cycle				x	

COMMENDATIONS

None

RECOMMENDATIONS

To address shortcomings

None

For further improvement

1. **Improve Public Information regarding Management and Quality assurance system:** Make publicly available on the website the procedures and responsibilities for the management and quality assurance system.

V. SUMMARY

The structure and progression of the Production Engineering programme are well-designed, with foundational subjects introduced early and followed by a logical sequence of production engineering topics, enabling gradual competency development and preparation for the final thesis. Research skills are emphasized from the start, and students report a good balance of teaching and learning methods, including lectures, practice, laboratory work, and projects, which effectively support learning outcomes. The Master's thesis topics are highly relevant, with strong links to industry and a good combination of analysis, simulation, and experimental research for academically oriented topics. The programme also allows for customization through specializations and electives, catering to individual student needs.

However, specific information about the learning outcomes and assessment methods for individual modules is not readily accessible via website, which may reduce transparency and limit students' understanding of expectations. Ensuring that detailed, module-specific learning outcomes and assessment criteria are available, now only accessible with a student accreditation password, would significantly enhance the clarity and quality of the programme.

However, there is insufficient information provided about specific learning outcomes and assessment methods for individual modules, which could hinder transparency and student understanding of expectations. Addressing this gap by offering detailed module-specific learning outcomes and assessment criteria would further enhance programme clarity and quality.

KU students have sufficient opportunities to acquire the necessary learning outcomes, and teaching is student-oriented. The balanced study programmes cover theoretical topics and practical skills necessary for learning outcomes. Various teaching methods are used based on subjects and students' needs to maximise results. A good laboratory base and research and development help make learning relevant and engaging for students. Students can participate in laboratory research and various student projects, all contributing to the above.

Student learning progress is monitored, feedback is provided, and issues are addressed if they arise. Study course feedback is a part of the teaching staff's daily work and is carried through continuously. Student feedback is considered, but in some cases, it is minimal and should be promoted.

There are sufficient qualified lecturers, associate professors, and professors to teach the study programme successfully. Applied research is conducted, students are involved in the process, and the results will be used to illustrate study course materials.

Teaching staff have good opportunities to develop their competencies. They are motivated and oriented to teach and participate in R&D and international programmes and projects. Support measures have been created for young or starting teaching staff.

The Production Engineering programme at KU effectively integrates research and education, with faculty and students engaging in projects on advanced materials, sustainable technologies, and digital manufacturing. Collaboration with industry and the EU-CONEXUS network enhances its relevance and visibility. While the programme excels in applied research, further emphasis on innovative initiatives and sustainable financial strategies could strengthen its impact.

KU provides well-equipped laboratories, modern facilities, and extensive library resources that support effective learning and research. Partnerships with industry offer valuable internship

opportunities, linking academic learning with practical experience. Continuous updates to resources, including new infrastructure projects like the STEAM Center, demonstrate a commitment to improvement. Involving students in resource planning and expanding international partnerships could further enhance facilities and their utilization.

Klaipeda University is dedicated to student success and development, excelling in transparent admissions and extensive support services. KU offers robust academic, financial, and psychological support, with a focus on accessible information and career guidance. Despite high student satisfaction, increasing motivation for international study programme remains a priority to enhance global experience and opportunities. KU's recognition of prior learning and effective communication underscores its commitment to fostering an inclusive and supportive educational environment.

The management and quality assurance of the Production Engineering programme at KU demonstrate a well-structured and collaborative approach aligned with institutional, national, and European standards. Positive aspects include the active involvement of students, teachers, and social partners in programme development and continuous improvement. The use of systems like the Academic Information System and compliance with ISO 9001:2015 standards ensure effective monitoring and systematic enhancements. Regular evaluations, including annual internal analyses and benchmarking against scientific advancements and international programmes, maintain programme relevance. Collaboration with manufacturing companies effectively aligns the curriculum with industry needs, ensuring high-quality training and professional preparedness. Additionally, students’ participation in feedback surveys and decision-making bodies, such as the Study Field Committee (SFC) and Senate, enhances inclusivity.

However, there is room for improvement in formalizing some processes, particularly informal contacts with stakeholders, to ensure consistency in feedback collection and programme updates. While employer participation in final theses defense and strategic planning is notable, expanding their role in broader programme governance could further strengthen industry alignment. Enhanced mechanisms to track and address feedback systematically could also improve the programme's responsiveness to emerging needs.