

STUDIJŲ KOKYBĖS VERTINIMO CENTRAS CENTRE FOR QUALITY ASSESSMENT IN HIGHER EDUCATION

ELECTRONICS ENGINEERING FIELD OF STUDY

Utenos kolegija | Higher education institution

EXTERNAL EVALUATION REPORT

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CONTENTS

| I. INTRODUCTION | 3 |
|--|----|
| 1.1. OUTLINE OF THE EVALUATION PROCESS | 3 |
| 1.2. REVIEW PANEL | 4 |
| 1.3. SITE VISIT | 4 |
| 1.4. BACKGROUND OF THE REVIEW | 5 |
| II. STUDY PROGRAMMES IN THE FIELD | 6 |
| III. ASSESSMENT IN POINTS BY CYCLE AND EVALUATION AREAS | 7 |
| IV. STUDY FIELD ANALYSIS | 8 |
| AREA 1: STUDY AIMS, LEARNING OUTCOMES AND CURRICULUM | 8 |
| AREA 1: CONCLUSIONS | 13 |
| AREA 2: LINKS BETWEEN SCIENTIFIC (OR ARTISTIC) RESEARCH AND HIGHER EDUCATION | 15 |
| AREA 2: CONCLUSIONS | 17 |
| AREA 3: STUDENT ADMISSION AND SUPPORT | 18 |
| AREA 3: CONCLUSIONS | 20 |
| AREA 4: TEACHING AND LEARNING, STUDENT ASSESSMENT, AND GRADUATE EMPLOYMENT | 22 |
| AREA 4: CONCLUSIONS | 24 |
| AREA 5: TEACHING STAFF | 26 |
| AREA 5: CONCLUSIONS | 27 |
| AREA 6: LEARNING FACILITIES AND RESOURCES | 28 |
| AREA 6: CONCLUSIONS | 29 |
| AREA 7: QUALITY ASSURANCE AND PUBLIC INFORMATION | 31 |
| AREA 7: CONCLUSIONS | 33 |
| V. SUMMARY | 34 |
| VI. EXAMPLES OF EXCELLENCE | 36 |

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: dr. Dmitrijs Pikulins;
- 2. Academic member: dr. Mário Pereira Véstias;
- 3. Academic member: dr. Tamás Pardy;
- 4. Social partner representative: dr. Donatas Pelenis;
- 5. Student representative: Mindaugas Paškauskas.

1.3. SITE VISIT

The site visit was organized on 23 April 2025 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 a need for translation during the meeting with Senior management and administrative staff of the faculty(ies); Team responsible for preparation of the SER; Teaching staff; Alumni and social stakeholders including employers.

1.4. BACKGROUND OF THE REVIEW

Overview of the HEI

Utenos kolegija, Higher Education Institution (UKHEI), is a state college **established in 2000** after the reorganization of Utena Medical and Business Schools. It operates as a public institution under a statute approved by the Government of the Republic of Lithuania in 2012. UKHEI is the only higher education institution in the Eastern Aukštaitija region, offering practice-oriented first-cycle (college-level) studies. The institution has two faculties—Faculty of Medicine and Faculty of Business and Technology—and provides **19 study programmes** across **16 study fields**. Its governance includes the Rector, Board, and Academic Board, supported by six departments, two services, an E-Study Centre, and a Library.

Overview of the study field

The study field of Electronics Engineering (UKHEI is represented by the Automatic Control Systems Study Programme (ACSSP), positioned as a strategically important programme within the Faculty of Business and Technology. It contributes to UKHEI's mission to deliver practice-oriented, regionally relevant higher education and supports its strategy of developing innovations, digital transformation, and the region in general. The Programme is closely aligned with industrial needs, particularly in the technologically advanced sectors of the Utena region. UKHEI maintains active partnerships with companies such as Teltonika, which contribute to curriculum updates, provide equipment for laboratories, and offer internship opportunities. Although research exchanges are limited, applied research activities and consultations are oriented toward industrial needs, IoT, and machine vision, reflecting also national development priorities.

Previous external evaluations

According to the SER, all study programmes at Utenos kolegija, have undergone comprehensive external evaluations since 2001. All evaluated programmes have been accredited. However, the Automatic Control Systems Study Programme (ACSSP), implemented since 2015, has not yet been evaluated by external experts. Therefore, there are no expert recommendations specifically for the ACSSP in the area under evaluation.

Documents and information used in the review

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

- Self-evaluation report and its annexes:
 - Study plans
 - Links between study results and subjects
 - o List of Final Thesis
 - o Detailed data on teachers.
- Final theses (in Lithuanian)

II. STUDY PROGRAMMES IN THE FIELD

First cycle/LTQF 6

| Title of the study programme | Automatic Control Systems |
|---|---|
| State code | 6531EX043 |
| Type of study (college/university) | college |
| Mode of study (full time/part time) and nominal duration (in years) | Full-time (3 years) Part-time (4 years) |
| Workload in ECTS | 180 |
| Award (degree and/or professional qualification) Language of instruction | Professional Bachelor in Engineering Sciences Lithuanian, |
| Admission requirements | English Not lower than secondary education, at least one state maturity exam passed. |
| First registration date | 2015 |
| Comments (including remarks on joint or interdisciplinary nature of the Programme, mode of provision) | |

III. ASSESSMENT IN POINTS BY CYCLE AND EVALUATION AREAS

The **first cycle** of the Electronics Engineering field of study is given a **positive** evaluation.

| No. | No. Evaluation Area | | | | | |
|-----|--|----|--|--|--|--|
| 1. | Study aims, learning outcomes and curriculum | 3 | | | | |
| 2. | Links between scientific (or artistic) research and higher education | 3 | | | | |
| 3. | Student admission and support | 4 | | | | |
| 4. | Teaching and learning, student assessment, and graduate employment | 3 | | | | |
| 5. | Teaching staff | 4 | | | | |
| 6. | Learning facilities and resources | 4 | | | | |
| 7. | Quality assurance and public information | 3 | | | | |
| | Total: | 24 | | | | |

*

^{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.

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 align with the regional labour market and societal needs. Institutional representatives confirmed that social partner input is collected through biannual programme committee meetings, and one lecturer is actively employed in the industrial sector. These practices indicate efforts to maintain relevance and practical orientation in the study content. Furthermore, including three specialization pathways suggests an attempt to tailor the Programme to diverse industry demands.

However, the documentation lacks evidence of a structured, traceable mechanism for consulting external stakeholders. The SER does not specify which companies were involved in shaping programme aims, nor does it describe how stakeholder feedback was analyzed and integrated into curriculum updates. Moreover, the Programme does not reference national or regional strategic documents (e.g. Smart Specialisation strategies) to justify its learning outcomes.

Additionally, no industry-standard tools or technologies (e.g., TIA Portal, SCADA, embedded systems) are explicitly mentioned in the programme learning outcomes or curriculum structure. This omission limits transparency and hinders the assessment of how effectively the Programme prepares students for real-world technological environments.

To strengthen alignment with the labour market and societal needs, it is recommended to:

- Document the external consultation process more clearly (participants, methods, impact);
- Integrate regional and national strategic documents into programme development;
- Map key industrial tools and platforms directly into learning outcomes and subject content.

In its current form, the Programme meets baseline quality expectations, but notable improvements are necessary to fully demonstrate its responsiveness to evolving technological and industrial demands.

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

The study programme's aims and learning outcomes are described as aligned with the mission and strategic goals of Utena University of Applied Sciences, and institutional representatives confirm this intention. There is visible cooperation with regional companies, participation of industry representatives in the programme committee, and examples of industry input (e.g., Teltonika's suggestion to include IoT subjects and donation of lab equipment) demonstrate responsiveness to local needs. These efforts support the HEI's goal of contributing to regional economic development.

However, no strategic planning documents or formal mechanisms are presented to verify this alignment. The Programme lacks a clear and documented mapping of institutional strategic goals (such as innovation, sustainability, or regional partnerships) to curriculum content or learning outcomes. There is no explanation of how the HEI's strategic initiatives are translated into specific teaching components, nor is there evidence of internal review processes that systematically assess and update alignment with the HEI's evolving strategy.

Furthermore, while programme staff mention regular consultations with social partners, these meetings do not appear to be embedded in a structured strategy-monitoring framework. Core strategic themes such as Industry 4.0, AI, or digitalization are not explicitly linked to course modules, and no institutional indicators are in place to track how the Programme supports long-term institutional goals.

To meet higher quality standards, the HEI should:

- Clearly link strategic documents to programme aims and outcomes;
- Develop monitoring mechanisms to evaluate how programme content supports the HEI's mission;
- Include industry representatives in long-term strategic development discussions;
- Reflect institutional priorities explicitly in curriculum and assessment design.

In its current form, the Programme demonstrates strategic intention and regional relevance but lacks the structured documentation and processes necessary to ensure sustained and measurable alignment with the HEI's mission and goals.

ANALYSIS AND CONCLUSION (regarding 1.1.)

The analysis of the documentation and meetings with stakeholders confirms that the study programme reflects regional labour market needs and aligns with the general mission of Utena University of Applied Sciences. Biannual meetings with social partners, company representation in programme committees, and cooperation with local industry (e.g., Teltonika) contribute to maintaining programme relevance and indicate a conscious effort to support regional development and applied professional education.

The inclusion of three specialization pathways reflects an intention to meet diverse labour market demands. Moreover, part-time lecturers from industry and equipment donations enhance practical orientation, which corresponds with the needs of the local economy.

However, both at the level of alignment with labour market needs and with the HEI's strategy, there are significant gaps in formalization, documentation, and monitoring mechanisms:

- There is no structured system for labour market needs analysis: the SER does not name specific companies, methods of data collection, or show how feedback influences programmelevel decisions.
- There is no clear integration of national or regional strategic documents (e.g., Smart Specialisation Strategies, National Industrial Development Plans) into programme aims or outcomes.
- Institutional strategy (e.g., innovation, digitalization, business partnerships) is not operationalized in course content, nor are there internal review indicators tracking strategic alignment.
- Industry-standard tools and platforms (e.g., PLC IDEs, SCADA, IoT ecosystems) are not explicitly reflected in the curriculum or learning outcomes, limiting transparency in preparing students for current industrial environments.

While regional cooperation is visible and staff demonstrate strategic intention, these efforts need to be systematized and better documented to ensure traceable, sustainable alignment with both the labour market and institutional goals.

The Programme meets the requirements, but there are substantial shortcomings in evidencing structured alignment with both national economic priorities and the HEI's strategic vision. Improvements in documentation, stakeholder feedback integration, and curriculum mapping to institutional strategy and technological developments are necessary to reach higher quality standards.

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

Higher education college studies. First cycle - professional bachelor. Qualification level IV

| | Requirement | Programme FullT / PartT |
|------------------------------|-------------|-------------------------|
| Total credits | >= 180 | 180 / 180 |
| Study field/year credits* | >= 45 | 60/45 |
| Study field credits | >= 120 | 156 / 156 |
| Practical placements credits | >= 30 | 30 / 30 |
| Final project credits | >= 9 | 12 /12 |
| Practical training credits | 1/3 | 64 / 64 |
| Contact hours | >= 20% | 2207 / 2387 |
| Independent work hours | >= 30% | 2593 / 2413 |
| Total hours | >= 4800 | 4800 |

^{*}The duration of part-time studies may be less than 45 credits per year, but the total duration shall not be more than one and a half times the duration of full-time studies

The study cycle is a first cycle study programme with 180 study credits, the minimum required. The study field credits per year are according to legal requirements for both full and part-time studies.

The total number of credits allocated to achieve the outcomes of the study cycle should be at least 120. The programme under analysis has 156 study credits.

The total number of study credits for the internship should be at least 30, which is the number of credits allocated in the programme. The number of credits for the final project should be at least 9 and 9 study credits were allocated for the internship.

Full-time studies shall have 60 study credits per year, but not less than 45 credits, and partitime studies should be at least 45 credits. The proposed programme has 60 credits each year.

The amount of contact work in the first cycle of studies shall be at least 20 per cent, and the student's independent work shall be at least 30 per cent.

Practical training hours should be at least one third of the total number of studies field credits. Full and part-time studies have a different number of contact and independent hours, but fullfil the legal requirements.

The programmes comply with legal requirements.

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

The learning outcomes of a first study cycle must span five dimensions:

- Knowledge and its application;
- Research skills;

- Special abilities;
- Social abilities;
- Personal abilities.

The SER establishes a link between the learning outcomes of the study cycle and the learning outcomes of the Programme. The offered subjects span the whole set of study cycle outcomes in a balanced way.

Several methods are used for knowledge teaching, including lectures, problem-based teaching and discussion. To improve social, personal and research abilities, presentations, work reviews and research activities are considered.

For practice development, the following activities are considered: laboratory work, practical exercises, visits to enterprises, among others.

Problem-based learning is adopted as a teaching/learning methodology to improve knowledge and its application.

Different assessment methods are adopted to verify if the students have acquired the intended learning outcomes. These include examination, project works, practice and laboratory work, oral presentations. These methods are important to assess whether the student is obtaining the different outcomes of the study cycle.

To share teaching and assessment methodologies and experiences, teachers promote seminars to discuss these issues.

Practice is a strong component of the Study Cycle and determines the ability of the students to acquire most of the learning outcomes. A well-established set of methodologies is necessary among the laboratory classes to guarantee a coordinated practice development among the laboratory classes.

The Study Program aims and learning outcomes, and assessment methods are consistent with the type and level of studies.

1.2.3. Curriculum ensures consistent development of student competences

The study program follows a traditional approach for the development of student competencies:

Year 1 – General knowledge, fundamentals, and basics of the main subjects.

Year 2 – Intermediate knowledge of the main subjects and problem analysis. Some design.

Year 3 – Advanced knowledge and problem design. Final internship and Final Thesis.

The partial studies follow the same sequence of competencies but in a four-year plan.

The Programme includes elective subjects on general education: philosophy, psychology, sociology and English.

The aims and learning outcomes are well defined and publicly available in Lithuanian and English. These are mainly determined by the labor market. Since the Study Programme is labor market oriented, there is an integration of the theoretical background of the study field and practical skills acquired in laboratory.

Stakeholders and Social partners are satisfied with the graduates, which is a good indicator that students are acquiring the right competencies. Some of the students work in areas different from the main area of their field of study. However, it was not possible to conclude that the competencies acquired by the students are broad enough to allow a broader approach to the labor market.

In general, students speak English and are easy to communicate with. The elective general subjects are important and contribute to this outcome.

Students and employers have said that the study cycle ensures the necessary learning outcomes. The contents of the study program reflect recent technologies due to a high investment in the laboratories and offers from the employers.

The identified aims and learning outcomes are consistent with the type and level of the study cycle.

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

The Study plan provides many ways to personalize the curriculum:

- Students can individualize their studies with an individual study plan. This individual plan includes the arrangement of subjects, examination schedule and project defence.
- Students have the possibility of individual tutoring once a month.
- May complete their studies in an external institution, inside or outside Lithuania.
- The Programme includes elective subjects on general education: philosophy, psychology, sociology (3 credits).
- The Programme includes three (3) alternative paths to personalize studies: Control of Mechatronic Systems, Control of Technological Equipment, and Electrical Engineering (15 credits).
- Choose final thesis topics.

While available, it is not clear how the individual study plan is put into practice, nor the level of flexibility. Even the regulation document (Study Regulations of Utenos Kolegija Higher Education Institution - resolution No AT-17 of 26 April 2019 of the Academic Board of Utenos Kolegija Higher Education Institution) does not detail the operationalization of this process. None of the students present in the meeting followed this option, which could be a consequence of a lack of information or because it is difficult to get an individual plan.

The electives in the final semester allow the student to follow a profile, and the electives in general subjects give them important transversal skills. Other important electives could be considered, such as entrepreneurship and project management.

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

The SER provides a detailed and structured procedure for thesis development and defence (paragraphs 55-63). Each thesis is an independent applied or research project where students can demonstrate their knowledge and critical thinking, and apply the engineering skills and tools obtained during the studies.

The final theses are rooted in real-world industrial challenges, and many of them are prepared in collaboration with regional companies (e.g. UAB Umaras, UAB DIY Baldai, etc.). This aligns well with the professional bachelor profile, emphasizing applied knowledge and solving practical problems. These also showcase students' autonomous planning, development, and implementation capabilities, matching the descriptors' requirements to plans and organizing practical activities.

Topics span various electronics and organization fields, including smart electronics systems, industrial robotics, and environmental control. This variety shows an assortment of graduate competencies and reflects the trends in the industrial sector.

The final thesis development process is well-structured, including topic selection, supervision, intermediate reviews, originality check (eLABa), and public defence in front of the qualification committee, which the Rector approves.

Evaluation criteria include technical quality, relevance, and demonstrated professional competencies, confirming their alignment with the field and cycle requirements. 29 final theses were defended during the assessment period, with an average score of 8.6 in the last year, demonstrating consistently good performance.

ANALYSIS AND CONCLUSION (regarding 1.2.)

The Automatic Control Systems study programme demonstrates general compliance with the legal requirements for first-cycle professional bachelor studies. The total number of credits, distribution across field-specific subjects, practices, and the final thesis, meet the established standards.

The Programme aims and learning outcomes are aligned with national descriptors and appropriately span the five required dimensions of the first-cycle qualifications framework. A variety of teaching and assessment methods is employed to support the achievement of the outcomes. However, the lack of detailed subject descriptions in English limits transparency and international accessibility. Moreover, the SER does not provide a clear, structured overview of how laboratory-based learning is implemented or coordinated across different subjects. Given the Programme's strong practical orientation, this raises concerns about the efficiency of hands-on learning experiences.

The curriculum follows a logical progression from general knowledge in the first year to specialized and applied competencies in the final year. Students can personalize their studies through elective general education subjects and three specialization tracks. While these formal structures are in place, the actual uptake of personalization options, particularly individual study plans, appears to be low. During the site visit, students confirmed limited use of this mechanism, suggesting either a lack of awareness or barriers to practical implementation. The regulations mention the possibility of personalization, but clearer communication and streamlined processes are needed to make this option more accessible.

The final thesis component is well structured and aligns with the applied nature of the Programme. Students demonstrate autonomy in planning and implementing real-world projects, many in collaboration with local industry. The thesis process includes supervision, originality checks (via eLABa), and public defence before a qualification committee. Nevertheless, the final theses primarily reflect regional needs, with limited evidence of international collaboration. Expanding opportunities for joint thesis supervision or Erasmus+ research integration would strengthen the international dimension of the Programme.

In summary, while the study programme meets the formal requirements and exhibits many strengths, particularly in practical alignment with the labour market, there are several shortcomings that need to be addressed. These include inconsistencies in programme documentation, insufficient clarity on practical training coordination, limited use of personalization options, and a weak international component in student project work. Addressing these areas would significantly enhance the Programme's overall cohere competitiveness.

AREA 1: CONCLUSIONS

| AREA 1 | Unsatisfactory - 1 Does not meet the requirements | - 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 |
|-------------|---|---|---|---|--|
| First cycle | | | X | | |

COMMENDATIONS

- 1. Foreign language and general education.
- 2. Strong cooperation with regional companies through programme committee and internships.

- 3. Inclusion of three specialization pathways aligned with different industry needs.
- 4. Institutional commitment to regional development is visible in staff responses and investments.

RECOMMENDATIONS

To address shortcomings

- 1. Establish a structured mechanism for collecting and documenting employer feedback.
- 2. Define indicators and procedures to monitor alignment with the HEI's mission.

For further improvement

- 1. The study programme could increase international collaboration in the thesis development and exposure of the results.
- 2. Explicitly integrate industry-standard tools and platforms into curriculum design.
- 3. Involve industry partners in long-term strategic planning, not only curriculum updates.
- 4. Develop a clear internal review cycle to reassess strategic alignment regularly.

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

SER:

- HEI has regulations related to scientific activities, intellectual property management, financing, and strategic research direction (determined by the academic board at the HEI).
 According to the SER, research results are integrated into study programmes.
- HEI reports having received upwards of 100 000 EUR per year in the evaluation period, most of which came from AR&D activities, and the lesser part from state funding (~1/3, except for 2022).
- HEI publishes the journal "Įžvalgos" and organizes the international scientific-practical conference. Lecturers are also invited to teach students an automation, control theory, and company organization. Students and teachers make visits to companies to learn about their activities. Cooperation with external partners helps improve subject content and curriculum.

Site visit

- 2022 outstanding income of 270k came from regional projects that HEI applied for to upgrade equipment (e.g. KUKA robots)
- Applied research is driven by industry needs and ministry mandate. Primarily industry, esp. when it comes to thesis topics. Focus areas: 1) Measurement instrumentation with industrial focus (example given of an IoT measurement system deployed for industry), 2) ICT, e.g. machine vision, 3) IoT (owing to newly upgraded lab equipment)
- SER team mentions that the industry takes consultancy from the UK.

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

SER:

- Owing to industrial links, the curriculum is updated with relevant new courses and related equipment, such as the elective on lot supported by Teltonika UAB. IoT metrology has been included with corresponding equipment. Electrotechnics and Electrochemistry was updated with a new focus on fuel cells and lithium-ion batteries.
- Exchanges with industry (Rokor UAB) and foreign/local HEIs (2 instances, incoming Erasmus+ mobility of 3 students from Turkey) are also reported. A SOLIDWORKS training is reported for one lecturer.
- Teaching staff participate in professional societies, such as the Lithuanian Educational Research Association.

Site visit:

- Plan to increase incoming Erasmus+ mobilities via BIP (e.g. Robotics + Management in May 2025), with projects connected to regional industry (report includes business plan creation for improving production)
- Study programs are aligned with industry needs. Senior management team confirms: Industrial representatives are included in study program committees and advise on changes, and meetings take place twice per year. Teachers confirmed: to meet industry 4.0 needs, IoT-related subjects were included.
- Teachers visit industrial exhibits to get updates on the latest technical advances
- Largest company employing local students ared airy, beer, and plastics manufacturers.
- UK is located in an industrial region, and collaboration with companies is reported:
 - o Teltonika contribution was confirmed by senior management staff.
 - o Meeting with Visaginas industrial representatives were mentioned.

- o SER team mentions collaboration with local industry, esp. agriculture (e.g. dairy)
- o Graduates are hired immediately, but their number is too few, ~50 would be needed in the region at the moment (confirmed by senior staff, SER team, teaching staff).
- According to the program director, ACS has the most potential from all UK programs (mentioned >1MEUR investment including EU funding, UK only HEI in region, EE being one of 3 study tracks).
- Teaching staff: University of Applied Sciences is always a step behind the leading edge, as staff cannot be found to teach leading-edge knowledge.

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

SER:

- Students can present their course and thesis works at local and international conferences. The biennial conference "A Country Where It Is Good to Live in" encourages students to share knowledge and research results. 5 students presented their work on automation, robotics, and smart home control in the evaluation period. The biennial conference "Aspects of Sustainable Development" features a student section with oral presentations, where 4 students presented in the evaluation period. In addition, students present their work at other domestic HEIs' conferences. 3 scientific publications and 10 conference presentations are reported in the SER.
- Six instances of student involvement in applied research projects were reported.

Site visit:

- 2nd year students:
 - Uktekas competition among students related to their area allows improving areaspecific knowledge.
 - Students can go to Kaunas University or industry (e.g. remote access to ABB robot simulator) if lab equipment is unavailable at Utena.
 - Students reported participating in a local conference, but value personalized tutoring more
 - Students themselves determine research topics based on career needs.
- Alumni students & society:
 - Students participated in conferences and meetings with manufacturers. Approx. 1-2
 meetings in a year. Often used private time with teachers to prepare. Knowledge
 applied to thesis works.
 - For more clarity: most students are part-time and studies are paid for by their employer (e.g. in the furniture industry), which can explain low research participation.

ANALYSIS AND CONCLUSION (regarding 2.1.)

SER indicates strong links with local and regional industry, stable research funding that is not entirely reliant on state income, and a scientifically active teaching staff. The HEI reported a dedication to integrating national strategic research directions into its regulations. However, it is not clear how the latest scientific results (e.g. Al applications in automatic control systems) are included in the study programme, and it is also not clear from the SER what the research focus areas of the HEI are.

Practices of student inclusion in applied research and scientific publishing are in place and have yielded results, but numbers should be improved. Also, incoming student mobility should be encouraged further, but it is equally important to encourage incoming staff mobility from external educational experts.

Site visit confirmed that the funding situation has been sustainable, with 2022 yielding exceptional income for equipment upgrades. Local and regional industry has close ties to HEI and ACS program, and at study program committee meetings twice a year, advise on changes to the program. Society partners confirmed the need for the ACS program, but also indicated significantly more graduates would be needed. Research at HEI is reacting to trends but is not proactively seeking new topics, and student involvement is low, albeit steps are taken to increase (e.g. Uktekas competition). Teachers create a supportive environment for students' individual development, adapting to their industrial jobs.

AREA 2: CONCLUSIONS

| AREA 2 | Unsatisfactory - 1 Does not meet the requirements | - 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 |
|-------------|---|---|---|---|--|
| First cycle | | | X | | |

COMMENDATIONS

- 1. Industry links are strong and diverse, and industrial needs drive updates to the study program.
- 2. State-of-the-art technology used by the industry is integrated in the study programme, and there is evidence of this (inclusion of industry 4.0 topics, IoT, machine vision).
- 3. Students value personalized tutoring provided by teachers and practice-oriented final theses.

RECOMMENDATIONS

To address shortcomings

1. Student engagement in applied research is currently low. Students praised personal tutorship by teachers, yet research engagement remained low, likely due to a lack of motivation. Perhaps this can be changed by: 1) ramping up competitions with tangible prizes (monetary, as supported by industry and municipality) that target developing industry-relevant technological/methodological improvements, 2) leveraging the personal connection to students, and strong industry linkages to engage students in research directly relevant to their daily work.

For further improvement

- 1. The inclusion of leading-edge scientific results ensures the program's long-term viability. Currently, in this area, the program seems reactive (integrating state-of-the-art results), and not yet proactive (anticipating new trends before they make it to industrial practice).
- 2. Incoming staff mobility, esp. from educational institutions, should be encouraged, also in response to (1.). This will allow integrating the latest methods and principles from the sciences.

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

Admission to Utena Kolegija HEI (UKHEI) is regulated by national and institutional frameworks, ensuring standardized and transparent procedures. The process follows the General Admission Regulations for Lithuanian higher education institutions and UKHEI's internal Student Admission Regulations, approved by the Rector.

Only applicants meeting the minimum academic performance indicators set by the Minister of Education, Science and Sports are eligible. These thresholds apply regardless of the year in which secondary education was completed.

Competitive score thresholds vary by funding type. From 2021 to 2023, the minimum score for state-financed places remained at 4.3, while for non-state-financed places with scholarships, it was set at 2.5. For study places not financed by the state, UKHEI sets its own minimum score.

As of 2024, all applicants must pass three State Maturity Exams: Lithuanian language, mathematics, and one elective subject. In addition, the arithmetic average of these exam results must be at least 16 points, corresponding to a satisfactory achievement level according to national standards. Competitive admission scores are calculated from four maturity certificate subjects, with weights assigned to each: Mathematics (0.4), one science or technology subject such as IT, Physics, Geography, Chemistry or Biology (0.2), a third non-repeating subject (0.2), and Lithuanian language and literature (0.2). The influence of additional criteria and points on the competitive score is defined by the annual procedure approved by the Minister of Education, Science and Sports for applicants to state-financed (SF) study places and study scholarships. For non-state-financed (SNF) places, UKHEI independently sets the criteria for awarding additional points.

At UKHEI, the number of entrants to the Electronics Engineering Field of Study in Automatic Control Systems Study Programme is showing an increase in 2023, 16 admitted students compared to 12 in 2022 and 11 in 2021, but not quite reaching the level of 2020, where the number of admitted students was 21. *Increasing numbers indicate a potential for the programmes* sustainability in the future. It is worth noting that admitted students maximum competitive score reached new highs in recent years (8.7 in 2023 and 8.69 in 2022) while the minimum score remains almost the same (2.65 in 2023, 2.79 in 2022, 2.54 in 2021).

The main cause of student dropout is the decision to discontinue studies for personal reasons, often due to a lack of motivation or capabilities during the first year. To address this problem, individual interviews are conducted to understand students' situations, with proposals such as individual assessment schedules or study suspension. Dropout prevention measures include monitoring lecture attendance, active support by academic group tutors, reminders about consultations and assessment deadlines, and offering flexible tuition payment options. Students' Retention in Studies Description, Adaptation Programme for First-year Students has been prepared to reduce the number of dropouts during the first year of studies. The statistics show that students' dropout percentage has significantly declined from 16.36 % in 2020-2021 to 8.16% in 2022-2023 and 10 % in 2023 – 2024.

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

UKHEI recognizes foreign qualifications and prior learning based on the Lisbon Recognition Convention and national legal acts, including Government Resolution No. 212 (2012) and internal admission and study regulations. Foreign qualifications are assessed under the Rector-approved Admission Regulations. Partial studies abroad are recognized under trilateral agreements, provided

there are no violations of pre-approved subject content. Non-formal and informal learning is recognized following institutional procedures, with students permitted to make up missing credits individually. Recognition is typically granted when documentation is complete and the content aligns with programme requirements. Common reasons for non-recognition include incomplete documentation, insufficient subject equivalency (less than 2/3 scope), or outdated content (over 10 years old).

ANALYSIS AND CONCLUSION (regarding 3.1.)

Admission to Utena Kolegija HEI (UKHEI) is regulated by national and institutional frameworks, ensuring standardized and transparent procedures. As of 2024, applicants must pass three State Maturity Exams: Lithuanian language, mathematics, and one elective subject. In addition, the arithmetic average of these exam results must be at least 16 points, corresponding to a satisfactory achievement level according to national standards. UKHEI recognizes foreign qualifications and prior learning based on the Lisbon Recognition Convention and national legal acts, including Government Resolution No. 212 (2012) and internal admission and study regulations. The UKHEI number of entrants to Electronics Engineering Field of Study in the Automatic Control Systems Study Programme shows an increase in 2023, with 16 admitted students compared to 12 in 2022 and 11 in 2021.

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

FACTUAL SITUATION

3.2.1. Opportunities for student academic mobility are ensured

UKHEI prioritizes student academic mobility as part of its Internationalisation Development Strategy (2021-2027), with opportunities provided through the Erasmus+ Programme. Students can participate in study mobility (3 to 12 months) and internship mobility (2 to 12 months).

In the evaluated period, 9 students participated in incoming mobility for partial studies (4.3% of the total students), but there were no outgoing EEFS students. Also, there were no incoming students for full-time studies. UKHEI has 5 Erasmus+ partner institutions and organizes informational sessions to promote mobility opportunities.

Lack of student participation in mobility programmes in UKHEI is due to majority of students being in part-time studies with jobs, this creates a very little room for students to participate in such a programmes. However, it was noted by students that shorter period programmes like Blended Intensive Programmes would sound more appealing and more students would be willing to participate in weeklong training sessions abroad.

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

Academic support includes counselling on subjects, credit transfer, internships, Erasmus+ opportunities, and career planning. Teachers offer regular consultations, and the Adaptation Programme aids first-year students in transitioning to university life.

Financial support includes scholarships (study, social, incentive, and one-time) and state loans. Students can also pay tuition fees in instalments, and support is available for students with financial hardships. Psychological support is provided through seminars and individual consultations.

Accommodation is available in three dormitories, with internet access for study purposes. The Student Representation ensures students' interests are voiced. All support services are mentioned and can be found on the UKHEI website.

3.2.3. Higher education information and student counselling are sufficient

Applicants can access details through the Document Admission Service via email and the UKHEI website. Once enrolled, students are supported by a group tutor who helps with adaptation and provides ongoing consultation.

Students attend an Introduction to Studies class at the start of their studies, which covers key topics like UKHEI's structure, student rights, study procedures, and available support. Information is also available via the Academic Information System (AIS) and other resources like VLE Moodle.

Subject-specific counselling is available through scheduled consultations with teachers, and students can also reach faculty via email, phone, or VLE Moodle. All essential documents are published on the UKHEI website under the relevant sections.

Students can get access to counselling with teachers which are usually provided during time in between sessions of part-time studies. This opportunity is used widely among students. During the visit it was confirmed that additional counselling sessions are used as individual schedules for exams and tests. Students have an option for individual counselling sessions as well. Attendance is sufficient.

In the beginning of studies group tutor was there for students and help was always provided when needed. No complaints by students were voiced.

ANALYSIS AND CONCLUSION (regarding 3.2.)

UKHEI provides opportunities through Erasmus+ Programme. Students can participate in study mobility (3 to 12 months) and internship mobility (2 to 12 months) programmes. Academic support includes counselling on subjects, career planning and regular consultations with teachers. Students can get scholarships (study, social, incentive, one-time) and state loans. Accommodation is available in three dormitories, with internet access for study purposes.

Since most of the students are working and are in part-time studies, there are not many complaints from their part. They are thankful to have even had the opportunity to get a degree in their region. Students are satisfied with teachers' accessibility, flexibility, and ability to manage their studies and work. According to students, tutors` role and the help she provided were enough, and no complaints were voiced. No complaints about the dormitories as well.

While Utenos kolegija has formal structures in place to support student academic mobility through Erasmus+ n, the actual participation rates indicate room for significant improvement:

- **Incoming mobility:** Over the evaluation only 4.3% of the students, and none were enrolled for full-time studies. This is a low figure by European higher education standards, where the goal is often to ensure that at least 10–20% of students.
- Outgoing mobility: The absence of outgoing students in the Electronics Engineering Field
 of Study (EEFS) is especially concerning, as participation in international studies or
 internships is important in developing global competencies and language skills.
- **Barriers:** The explanation that most students are part-time and employed is valid and reflects a real constraint. As noted by students, shorter programmes like BIPs would be far more attractive, and therefore, efforts should be made to systematically implement such options.

AREA 3: CONCLUSIONS

| AREA 3 | Unsatisfactory - 1 Does not meet the requirements | - 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 |
|-------------|---|---|---|---|--|
| First cycle | | | | X | |

COMMENDATIONS

- 1. Students can get access to counselling with teachers, usually provided between sessions of part-time studies. This opportunity is used widely among students.
- 2. Ability for students to make individual schedules for exams and tests, mainly during additional counselling sessions.

RECOMMENDATIONS

To address shortcomings

N/A

For further improvement

1. It is recommended to utilize Blended Intensive Programmes to increase student participation in academic mobility opportunities. Short periods of academic mobility programs are way more attractive to part-time students.

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

Both full and part-time study plans are available. The part-time study plan allows working students to manage the time necessary to follow studies to help them follow the studies while working in their jobs.

The study plan is focused on practical knowledge, so the participation in seminars, practical classes, and training practice is mandatory. However, participation in theoretical lectures is not mandatory. Therefore, the attendance of lectures is lower. Students don't put much emphasis on theoretical lectures. Some classes can take place online.

Moodle is the major information management system used to share and submit information from both teachers and students.

The assessment of learning outcomes is regulated. Assessment is based on a 0 to 10 points scale. All information about a subject is provided to the students in the introductory lecture. The Assessment methods can be adapted for students with special needs. It is up to the Study Programme Committee to determine the number of interim assessments for a specific subject. Students may ask for feedback about their works after receiving a grade, but the process is not compulsory.

Graduate students may continue their studies in Lithuanian and foreign HEIs, but only a few students continue their studies. To achieve this, extra studies are needed to achieve the necessary background to initiate their studies in a University.

Students face difficulties in the first year performing basic subjects, such as mathematics and physics. Teachers are aware of this problem and have adopted some mechanisms to motivate students, like using practical cases from the study field.

The practice outcomes are achieved in a laboratory environment. Access to the laboratories follows a particular schedule.

In the final year the HEI guarantees internships in local institutions with which there is a signed cooperation.

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

During admission, applicants with 0–25% working capacity are exempted from registration fees, while those with 30–55% working capacity receive a 50% reduction. Students with disabilities are eligible for targeted financial benefits through the State Studies Foundation and social scholarships. Individualized study processes are implemented, including extended time for tasks, adapted assessment methods, alternative study materials, and remote learning via Moodle and video conferencing systems. Physical accessibility is guaranteed by infrastructure adaptations such as ramps, wheelchair-accessible elevators, and modified restrooms. The HEI provides specialized assistive technologies, including high-contrast keyboards, screen-reading software (JAWS 14), Braille printers, and hearing assistance systems. Students with significant disabilities are given priority for accommodation in student housing. Integration into the academic community is further supported by tailored pedagogical strategies that accommodate diverse learning needs, promote inclusion, and foster active participation in academic life.

ANALYSIS AND CONCLUSION (regarding 4.1.)

Students don't put much emphasis on theoretical lectures. There should be strategies to increase attendance, like compulsory surveys.

The person responsible for a subject should participate in the definition of the assessment method of the subject. The Study Programme Committee should draw up a general evaluation plan to guarantee that at some point students are not overloaded with work and/or examinations. The HEI should consider extra training during the Programme for students who intend to continue their studies. Different learning methodologies should be adopted at different stages of the studies. Laboratories should be open or semi-open where, for example, a technician could control access to the laboratory.

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

Monitoring learning progress in the Automatic Control Systems programme at UKHEI is systematic and purposeful, supporting students' professional development through timely feedback and well-structured academic support.

General learning progress is evaluated after each examination session, analysed and discussed in the academic groups. However, the progress is also monitored through continuous assessment methods during the semester: practical tasks, laboratory work etc. Thus, teachers assess not only the final results, but also the process, allowing them to adapt to the students' performance and feedback. All the assessment criteria for every course are given in advance and are aligned with the learning outcomes of specific courses and the program. The virtual learning environment Moodle is actively used to provide feedback, track students' participation, upload learning materials and allow students to review their own performance and progress in each study course.

Feedback to students is provided systematically. Teachers offer consultations based on student need and performance, and individual learning plans are developed if necessary.

4.2.2. Graduate employability and career are monitored

From a social partner's perspective, systematic monitoring of graduate employability and career progression is essential for evaluating the real-world relevance of the study programme. While representatives of HEI emphasize the close cooperation with regional companies and the demand for electronics engineering graduates (e.g., a specific company reporting a need for up to 50 specialists), there is no structured or consistently documented mechanism for tracking graduates' employment outcomes within 12 months after graduation.

The institution indicates regular meetings (twice per year) with social partners and student internship supervisors. These meetings serve as indirect sources of information about graduates' preparedness and industry alignment. However, no clear methodology or tools (e.g., surveys, tracer studies, or integration with STRATA data) were presented to show how employment statistics are collected, analyzed, or used in curriculum updates.

In the absence of quantitative data, such as employment rates, sector-specific placement, or the extent to which graduates work in positions related to their qualification, it is difficult to assess the actual effectiveness of the Programme in preparing students for the labour market. Furthermore, there is no evidence that employer feedback on graduate competencies (e.g., knowledge of PCB design, embedded systems, or automation platforms like TIA Portal or LabVIEW) is systematically used to inform curriculum adjustments.

While it is commendable that companies like Teltonika provide practical tasks and even equipment for training, the institution should move beyond anecdotal insights and establish a formal graduate tracking and feedback system, including:

- Structured alumni and employer surveys are conducted annually.
- Documentation of curriculum changes informed by this data.
- Transparent presentation of employment rates in the electronics engineering sector.
- Analysis of alignment between job roles and study programme outcomes.

Without these elements, the Programme's responsiveness to labour market dynamics remains qualitative mainly and lacks traceable impact indicators.

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

UKHEI has institutional mechanisms to ensure academic integrity, including the mandatory use of the eLABa system for plagiarism checks of final theses. The acceptable similarity threshold is 30%, and in cases exceeding this, the thesis defence is postponed. According to the SER, **no cases of academic dishonesty were reported** during the evaluation period.

The HEI also supports tolerance and non-discrimination by providing individual study plans, flexible consultations (also for part-time and disabled students), and teacher training. International and Erasmus+ students (despite the limited number) are integrated into local study groups, supporting inclusiveness and cultural tolerance.

While the framework is functional, further efforts to increase student awareness of academic ethics and more visible communication of diversity policies would strengthen implementation.

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

The procedures for submitting and processing appeals and complaints at HEI are clearly defined, publicly available, and effectively implemented within the Automatic Control Systems study programme.

Students are informed of their rights and the procedures from the beginning of their studies, with relevant regulations outlined in internal documents accessible to them. Appeals related to assessment results or procedural issues are handled through a structured process involving written submissions, timely review by competent bodies, and formal decisions made following institutional policy. Complaints are addressed via the commission, which ensures fairness, transparency, and protection of student rights.

No appeals of complaints were recorded. During the onsite visit, the students confirmed that all the arising complaints and problems are effectively solved by directly addressing the academic staff, avoiding the use of official procedures.

ANALYSIS AND CONCLUSION (regarding 4.2.)

While individual teachers monitor student performance within their courses during the semester, a comprehensive overview of each student's overall academic progress remains unclear until the examination period. It is recommended to develop institutional tools or systems that allow early identification of students at academic risk, such as those frequently absent or underperforming across multiple subjects, enabling timely intervention and support to prevent potential expulsion.

Although no appeals or complaints were recorded during the evaluation period, these procedures and the lack of reported issues suggest that students are generally satisfied with their studies or that potential conflicts are being prevented or resolved informally and constructively.

AREA 4: CONCLUSIONS

| AREA 4 Unsatisfactory - 1 Does not meet the requirements, but there are | Good - 3 Meets the requirements, but there are | Very well nationally and internationally | 5 Exceptionally well nationally and |
|--|---|--|--|
|--|---|--|--|

| | substantial shortcomings to be eliminated | shortcomings to be eliminated | without any shortcomings | internationally without any shortcomings |
|-------------|---|----------------------------------|-----------------------------|--|
| First cycle | | X | | |

COMMENDATIONS

- 1. Individual study programs are available.
- 2. Participation in seminars, practical classes, and training practice is mandatory.
- 3. The possibility of attending classes online.
- 4. Students may choose an internship themselves.
- 5. The institution maintains active cooperation with regional companies, including regular meetings with social partners to discuss graduate skills and labour market needs.
- 6. Companies such as Teltonika contribute to practical training by providing equipment and tasks, strengthening the applied nature of the Programme.

RECOMMENDATIONS

To address shortcomings

- 1. Adopt new methodologies in theoretical lectures to increase attendance.
- 2. Adapt teaching methodologies for different years of the study cycle
- 3. Feedback on students' work should be compulsory.
- 4. Laboratories should be open or semi-open for effective practical work.
- 5. Establish a structured graduate tracking system that collects employment data within 12 months after graduation, including sector-specific placement and role alignment.
- 6. Implement formal feedback mechanisms (e.g., surveys) to gather employer and alumni input on graduate competencies and use this data in curriculum development.

For further improvement

- 1. It could be beneficial to ensure similarity checks not only for final theses but also for all written assignments developed during the studies, as Moodle provides such functionality. This would raise students' awareness of proper citation practices early on and help prevent plagiarism systematically across all studies.
- 2. Present employment statistics and trends clearly in programme reports to support data-driven decision-making and accreditation readiness.
- 3. Strengthen the feedback loop by documenting how insights from graduate career monitoring lead to specific updates in course content and practical training tools.

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

SER: In the evaluation period, the number of teachers was 18-22, with approx. 1:3 teacher-student ratio. While this is highly supportive to students, it also raises pronounced concerns about the sustainability of the program. This is compounded by the decreasing number of students YoY. Out of the 18 teachers, 12 work full-time, and 6 part-time. All are MSc holders and 8 are PhD holders, and over ¾ have >3 years of experience. No information is provided on the age distribution and language skills in the SER.

Site visit: English language skills are limited among the general staff, but most of the teaching staff were able to communicate in English. English training courses for teachers are organized to improve English language skills – levels A2, B1, B1+. To improve the number of students, the SER team said the best way is to have a good word from graduates. Age and gender ratio seem sustainable for the foreseeable future. Several teachers have other affiliations to HEIs or industry, which can help knowledge exchange.

ANALYSIS AND CONCLUSION (regarding 5.1.)

Teaching staff is well-qualified (number of PhD holders >1/3) and highly available (1:3 teacher-student ratio). However, the low utilization of teachers due to low student numbers also raises concerns regarding long-term sustainability. Limited English knowledge among the general staff is a concern, but the teaching staff is mostly able to speak English.

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

SER: Staff mobility under Erasmus+ programme is encouraged (links to >65 institutions), and in total at the HEI 45-67 visits took place per year. Related to the program, about 15-20% of the teaching staff participated in outgoing mobility. Incoming exchanges to the HEI were disturbed by Covid, and numbers have not yet recovered. In 2021-22, out of 44 incoming visits, 1 was related to the Programme evaluated.

Site visit: Teaching staff reported that it is typically the same staff participating in exchanges (although most of the teaching staff at the panel meeting reported having participated). They also report a lack of interest from foreigners in Utena region as the reason for low incoming exchange numbers. Teaching staff prefers industrial exhibits (to learn about latest technological trends), which can be covered by HEI funds, but one teacher reported industrial invitation from Siemens, Stadler.

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

Teachers are attested every 5 years, and a performance-based salary component was introduced in 2024. For a teaching staff of 18, 4-7 pedagogical trainings are reported in the SER, and 5-12 professional trainings per year. English language trainings are offered at three levels (A2, B1, B1+). Digital competences and course material preparation are encouraged. Internal didactics seminars are held.

ANALYSIS AND CONCLUSION (regarding 5.2.)

While the institutional teaching staff participates in outgoing mobility actively, only 15-20% of teachers in the EEFS program participated. Incoming exchanges were also low in the evaluation

period. Teachers' professional development is supported, and about a quarter to a third of the staff participate in training annually (professional and pedagogical). English language and digital competences are also actively developed. Attestations are held every 5 years, and a performance-based salary component has been introduced.

AREA 5: CONCLUSIONS

| AREA 5 | Unsatisfactory - 1 Does not meet the requirements | - 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 |
|-------------|---|---|---|---|--|
| First cycle | | | | × | |

COMMENDATIONS

- 1. High number of qualified teachers
- 2. Most staff had publications in eval. period (see area 2)
- 3. Good opportunities for professional self-improvement

RECOMMENDATIONS

To address shortcomings

N/A

For further improvement

- 1. Incoming staff exchanges should be encouraged to promote knowledge-sharing. Also, the outgoing mobility of field-specific staff should be encouraged to increase
- 2. Utilization of the teaching staff, or the number of students should be increased. Currently, the highly qualified teaching staff is underutilized. If the number of local students remain low, offering remote learning options could help grow the numbers.
- English language skills need further improvement to be able to support full-time international students. Attracting international students is one way to boost the number of graduates and help satisfy growing industrial demand.

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

HEI provides a solid foundation of facilities, informational, and financial resources to support the effective implementation of the Automatic Control Systems study programme. The learning infrastructure includes modern classrooms and laboratories equipped with up-to-date technical resources relevant to electronics and automation engineering. These include electrical engineering labs, automation systems labs, electronics and measurement equipment, programmable logic controller (PLC) kits, and computing facilities necessary for simulation and design.

The students also have a recreational area, where they can take a break from the learning process, which is essential for stress reduction and maintaining academic motivation.

The adaptation of facilities for students with disabilities is addressed on a case-by-case basis. While some premises are already accessible, the institution expresses readiness to make additional accommodations in response to student needs. This reflects a student-centred and inclusive approach, though further systematic upgrades would strengthen universal accessibility.

One of the Programme's strong aspects is its established cooperation with external internship providers, offering students real-world learning experiences in regional companies. These partnerships include long-term collaborations with enterprises. Students can choose or suggest internship locations, providing personalization and more substantial alignment with individual career goals. Internships occur in well-equipped industrial environments, ensuring students acquire handson experience aligned with their future professional responsibilities.

The library and informational resources are a combination of physical and digital services. The library offers relevant and updated printed literature in engineering and electronics and access to electronic databases, e-books, and scientific journals via the virtual learning platform. The library also provides study spaces and computer access, supporting individual and group learning. Librarians offer assistance with research and information search skills. Moreover, the VLE Moodle is widely used to deliver and manage course content, provide feedback, monitor student progress, and host digital learning materials.

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

HEI demonstrates a consistent and strategic approach to the planning and upgrading resources for the Automatic Control Systems programme.

There is a clear commitment to resource development, as shown by the significant investment of 800,000 EUR in recent years, directed toward upgrading physical infrastructure, renewing laboratories, and improving IT and digital learning environments. These upgrades include the modernization of automation laboratories, the acquisition of up-to-date measuring and control devices, improvements to teaching and study spaces, and the expansion of computing resources. Such investments directly align the facilities with current technological standards and support the development of the study programme.

Financially, the institution ensures resource availability through its budgeting system, which allocates funding for infrastructure maintenance, IT upgrades, laboratory renewals, and digital services. The planning and upgrading of resources align with student and teacher needs and follow the institution's broader strategic goals. Planning also considers inputs from programme committees, student feedback, and analysis of trends in the engineering and electronics sector, ensuring that resources remain relevant.

Additionally, the digital infrastructure, including the VLE Moodle and online access to learning materials, is continuously maintained and enhanced to support full-time and part-time students. The

library expands its physical and electronic collections based on course requirements and student demand.

The overall resource planning and renewal strategy maintains a high-quality, modern learning environment, ensuring that the Programme remains competitive and aligned with the labour market trends.

ANALYSIS AND CONCLUSION (regarding 6.1.)

The Automatic Control Systems study programme at HEI is supported by a **well-developed infrastructure and resource base that ensures an effective learning process**. The institution provides modern laboratories, including automation, electronics, and computing facilities. The library and information services are robust, offering access to printed and digital resources. At the same time, using the VLE Moodle platform enables flexible, interactive learning and access to course content, feedback, and assessment.

Facilities are generally adapted to support students with special needs, with further adjustments made upon request. Moreover, students benefit from real-world training environments through well-established internship partnerships with regional companies. These internships play a critical role in developing students' professional skills and aligning them with the labour market.

The institution has shown a strong commitment to resource planning, with a notable 800,000 EUR invested in recent years to improve infrastructure, upgrade laboratories, enhance IT systems, and modernize teaching environments. Resource planning is conducted systematically, aligned with institutional strategy, and informed by feedback from students and academic staff. Financial mechanisms are in place to ensure sustainable resource renewal.

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AREA 6: CONCLUSIONS

| AREA 6 | Unsatisfactory - 1 Does not meet the requirements | - 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 |
|-------------|---|---|---|---|--|
| First cycle | | | | Χ | |

COMMENDATIONS

- 1. The institution has demonstrated a strong commitment to modernizing its learning environment.
- 2. Well-established partnerships with regional companies, with access to modern industrial facilities
- 3. The integration of digital learning tools (Moodle etc.).

RECOMMENDATIONS

To address shortcomings

1. N/A

For further improvement



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 study quality management system is based on the ISO 9001. A group of processes and metrics are used to assess the Programme's quality, such as student admission, preparation of study and exam schedules, organization of studies, management of professional practices, final theses, dormitories, student career planning and scholarships. The responsibility for quality management is distributed throughout all hierarchies of the Institution and Coordinators of the Study Cycle. The international academic exchanges are also subject to quality management.

Most quality metrics are taken from surveys from students, teachers, and employers. A quantitative analysis can be extracted from these surveys, and measures can be taken. Some aspects need immediate action, while others need more time to assess and improve. The results are made public for a transparent analysis of the conclusions.

The internal quality assurance methodology and processes are well defined, but their functionality and effectiveness are not demonstrated.

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

Involving stakeholders - students, employers, alumni, and social partners - in internal quality assurance (IQA) processes ensures Programme's relevance and continuous improvement. The institution intends to involve external stakeholders through regular (twice-yearly) meetings with social partners, study programme committees, and internship analysis. Examples include collaboration with companies such as Teltonika, whose input led to including IoT-related content.

However, while these practices are ongoing, the SER does not sufficiently document how stakeholder input is analyzed, translated into decisions, or followed up. There is no clear evidence of structured tools (e.g., surveys, focus groups) or regular summaries of decisions influenced by student or employer feedback.

From a social partner's point of view, more transparent documentation of outcomes, such as curriculum updates or laboratory investments made in response to stakeholder suggestions, would strengthen the process. Student feedback appears to be collected, but its direct impact on programme improvements is not demonstrated.

To ensure the process is not only formal but also functional, it is recommended to:

- Expand documentation of stakeholder engagement (e.g., meeting minutes, decision logs).
- Establish thematic advisory groups from industry to suggest specific curriculum updates.
- Develop effectiveness indicators, such as employer satisfaction with graduate skills or willingness to continue hosting interns.
- Demonstrate how student feedback has led to concrete content or teaching practice changes.

The current level of stakeholder engagement is promising but requires greater structure, transparency, and outcome documentation to meet the expectations of an effective IQA system fully.

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

HEI ensures that information on the Automatic Control Systems study programme, including its structure, learning outcomes, admission requirements, and improvement processes, is collected, analyzed, and made publicly available through multiple communication channels.

The institution regularly updates its official website, where detailed programme descriptions, learning outcomes, admission criteria, and contact details are accessible to prospective and current students, employers, and the general public. Additionally, information is disseminated through social networks, informational events, and direct outreach to schoolchildren (e.g. through technology days competitions). Study programme information is also available via national platforms like the AIKOS database.

Internal quality assurance procedures include the collection of student and stakeholder feedback, monitoring graduate employment data, and analyzing academic performance. These insights are used to inform programme reviews and updates, and the outcomes of such improvements, such as curriculum revisions or changes in teaching methods, are also shared through institutional communication channels.

Although there is no external evaluation of the current version of the study programme yet, the previous evaluations and accreditations have also been published, and the institution commits to transparency in future reviews.

7.1.4. Student feedback is collected and analyzed

HEI has established a systematic and structured process for collecting and analyzing student feedback within the Automatic Control Systems study programme. Students are regularly invited to provide feedback on study quality, course content, teaching methods, assessment practices, and learning resources. Feedback is analyzed at several levels — by individual teachers, programme committees, and faculty administration. The Study Quality Committee is key in evaluating student feedback and initiating improvements where needed. Examples include teaching method adjustments, study material updates, and schedule adaptations. The process ensures students' voices are reflected in programme development and daily study experience.

The report defines several points where student-initiated changes were implemented:

- The library, which was previously located far from the city centre, was relocated to the central building of UKHEI to improve accessibility for students.
- Students reported a lack of clarity regarding deadlines for subject tasks. In response, the faculty published detailed task information in the VLE Moodle environment next to the course timetables.
- Students revealed a need for more comfortable rest areas. As a result, soft chairs were donated by the Alumni Club and placed throughout the faculty buildings.

These examples demonstrate that student feedback is actively used to improve the study environment, resources, and support systems.

ANALYSIS AND CONCLUSION (regarding 7.1.)

The HEI has several mechanisms to assess the quality of the Programme involving all the institution's stakeholders. Anonymous questionnaires to collect feedback from students may be hard to follow, and may be used by students just to complain about their bad results.

The functionality and effectiveness of the quality management process are not demonstrated. More than formal, the quality assurance plan should be functional. The plan should include clear metrics and thresholds determining when some aspect needs restructuring. Also, it should include indicators about the effectiveness of the restructuring measures and the time expected for a measure to take effect.

HEI demonstrates a clear and effective approach to the transparency of programme information and the collection and use of student feedback within the Automatic Control Systems study programme.

The institution ensures that comprehensive information about the Programme — including structure, learning outcomes, admission requirements, improvement processes, and quality indicators — is collected, regularly updated, and publicly available.

Moreover, the HEI uses available social networks to effectively disseminate information about study programmes, student achievements, and events, enhancing visibility and transparency among students, applicants, and social partners.

AREA 7: CONCLUSIONS

| AREA 7 | Unsatisfactory - 1 Does not meet the requirements | - 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 |
|-------------|---|---|---|---|--|
| First cycle | | | X | | |

COMMENDATIONS

- 1. Study quality management system based on the ISO 9001.
- 2. Quality management involves all stakeholders.
- 3. International academic exchanges are also subject to quality management.
- 4. Social partners and students are formally involved through study programme committees and internship evaluations.
- 5. There is a clear institutional intention to cooperate with companies on programme relevance, especially in technical fields.

RECOMMENDATIONS

To address shortcomings

- 1. Establish structured mechanisms (e.g., focus groups, surveys) to gather feedback from employers and alumni and use it in programme updates.
- 2. Document specific changes made based on stakeholder input and communicate these back to stakeholders to close the feedback loop.

For further improvement

- 1. Distinguish between short-term changes and long-term changes for quality management.
- 2. Regularly analyze student and employer feedback and show its influence on content, teaching methods, or practical training design.
- 3. Include clear metrics and thresholds to assess quality, determining when some aspect needs restructuring.
- 4. Include indicators about the effectiveness of the restructuring measures and the time expected for a measure to take effect.

V. SUMMARY

The external evaluation panel has completed its review of the Automatic Control Systems professional bachelor's study programme offered by Utenos kolegija (UKHEI) in the study field of Electronics Engineering. The review was based on the Self-Evaluation Report (SER), annexed documents, responses during the site visit, and the national methodology for external assessment. The panel finds that the Programme demonstrates a serious and structured approach to applied higher education, with evident efforts to meet regional needs and modern pedagogical tools.

Strengths identified across evaluation areas

1. Alignment with the regional labour market and practical orientation

The Programme is well-aligned with the college's mission of serving the needs of the regional workforce. It focuses on applied learning and provides students with relevant skills for the automation and control systems industry. The study programme structure is logically aligned with labour market needs, and students benefit from direct access to internships with regional companies (such as UAB Umaras and UAB DIY Baldai, etc.), which offer real-world training opportunities.

2. Modern and well-equipped infrastructure

The college has significantly invested in learning infrastructure, including laboratories dedicated to automation systems, electrical engineering, electronics, and computer-based simulation. An 800,000 EUR investment over recent years has upgraded both physical and digital learning environments, including measurement equipment, programmable logic controllers, and computing tools necessary for the study field.

3. Flexible study formats and accessibility

UKHEI offers full-time and part-time study modes, with schedules accommodating working students. Online learning via Moodle and video conferencing tools enhances access to learning materials and enables flexible participation. The HEI has taken steps to accommodate students with special needs by providing a variety of tools and resources.

4. Commitment to academic integrity and inclusive values

The use of the eLABa system for final thesis originality checks, as well as a structured defence process, helps ensure academic integrity. No cases of academic dishonesty were reported during the evaluation period. The institution promotes tolerance and non-discrimination through tailored support services, individual consultations, and integrating Erasmus+ and international students into local study groups.

5. Transparent and student-friendly assessment system

Assessment methods are communicated to students and aligned with learning outcomes. Continuous assessment (through laboratory tasks, interim evaluations, etc.) allows students to monitor their progress in the context of a subject. Teachers offer feedback and consultations, and assessment accommodations are available for students with special needs.

6. Constructive institutional culture and engagement with stakeholders

Students, alumni, and social partners expressed satisfaction with the learning environment and the relevance of the Programme. Social partners are involved in internships and final project evaluation, creating a feedback loop that aligns learning outcomes with practical needs.

Areas needing improvement

Despite these strengths, the panel identified several areas where further development is necessary to improve the quality and effectiveness of the study programme.

1. Weak engagement with theoretical content

Students tend to focus heavily on practical training, with low participation in theoretical lectures. There is insufficient institutional strategy to encourage attendance or to communicate the importance of theoretical foundations in engineering. Innovative approaches could increase engagement, such as blended activities, flipped classroom models, or integrating theoretical elements into practical projects.

2. Limited formalization of individual learning pathways

Although students can theoretically request an individual study plan or adapt elements of the curriculum (e.g., elective modules and thesis topics), these options are underutilized. During the site visit, no students reported using individualized plans. The process lacks transparency; clearer procedures and promotion are needed to make this option viable.

3. Fragmented academic progress monitoring

Although teachers monitor student performance within individual subjects, no centralized system tracks student progress across the curriculum to detect academic risk early. Developing institutional tools to identify at-risk students based on attendance, low performance, or non-completion of interim assessments could reduce dropout rates and improve support services.

4. Limited internationalization in academic content

While some Erasmus+ mobility takes place and international students are integrated locally, there is room to further internationalize the curriculum through guest lectures, collaborative thesis supervision, or participation in international research or applied projects. This would improve global competencies and visibility. In addition, the lack of study materials and subject descriptions in English limits the Programme's accessibility for incoming students and restricts wider internatiolization.

Acknowledgement

The review panel would like to thank UKHEI for the professional preparation of the Self-Evaluation Report and the open and constructive approach during the site visit. The panel appreciates the transparency of the discussions with academic and administrative staff, students, alumni, and social partners, all demonstrating engagement, commitment to quality improvement, and a shared vision for the development of the study programme.

The panel believes that the institution can further improve the Programme by addressing the identified shortcomings, strengthening its strategic planning processes, and expanding both the academic depth and international aspects of the student experience.

VI. EXAMPLES OF EXCELLENCE

Examples of excellence should include examples exhibiting exceptional characteristics that are, implicitly, not achievable by all.

N/A