



**STUDIJŲ KOKYBĖS VERTINIMO CENTRAS  
CENTRE FOR QUALITY ASSESSMENT IN HIGHER EDUCATION**

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## **ELECTRONICS ENGINEERING FIELD OF STUDY**

**Vilnius Gediminas Technical University**

### **EXTERNAL EVALUATION REPORT**

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Report prepared in 2025  
Report language: English

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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. Sean Mc Grath
2. Academic member: Assoc. Prof. Mariusz Stępień
3. Academic member: Assoc. Prof. Marios Kasinopoulos
4. Social partner representative: Saulius Stanevičius
5. Student representative: Ugnė Viktorija Paulikaitė

## **1.3. SITE VISIT**

The site visit was organised on 09 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 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

Vilnius Gediminas Technical University (Vilnius TECH) is a state-owned public university in Lithuania, recognized as one of the country's leading institutions for technology and engineering education. Founded in 1956, it initially operated as part of the Kaunas Polytechnic Institute before evolving into an independent technical university in 1969. Today, Vilnius TECH encompasses multiple faculties, departments, research centres, and institutes, offering a broad spectrum of study programs across 26 fields, primarily focused on engineering, IT, and technology. The university operates under a collegial governance structure, with its Council and Senate overseeing strategic and academic affairs, while the Rectorate manages daily operations.

### Overview of the study field

The field of Electronics Engineering at Vilnius TECH plays a pivotal role within the university's technical education and research framework. This field is integrated into both the Faculties of Electronics and Creative Industries, reflecting a multidisciplinary approach that bridges engineering with innovative applications. The study programs span bachelor's and master's levels, covering areas such as Electronics Engineering, Computer Engineering, Event Engineering, and Telecommunications Engineering. These programs are aligned with national and international educational standards and are continuously updated to meet evolving technological trends and labor market demands. Strategic collaborations with industry leaders, such as TELTONIKA IoT GROUP, and participation in international research projects further enhance the relevance and impact of this field within both academic and professional contexts.

### Previous external evaluations

The study programs within the Electronics Engineering field at Vilnius TECH have undergone several external evaluations aimed at ensuring academic quality and alignment with industry needs. Past reviews highlighted the clarity and relevance of program objectives, though recommendations were made to enhance the visibility of learning outcomes and modernize specific course content, such as modules on microcontrollers. In response, the university has updated curricula, improved transparency through online platforms, and ensured consistent workload distribution in final theses. These evaluations confirmed that the programs meet legal and educational standards while emphasizing continuous improvement, student engagement, and responsiveness to technological advancements.

### 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*
- *Final theses*

### Additional sources of information used by the review panel:

List of additional sources of information's included:

- *Graduate Employment Data*
- *Student Feedback & Involvement*
- *Information about Student and Social partners Feedback & Involvement*

- *Information about Quality Assurance Mechanisms*
- *Information about Admission Trends & Programme Sustainability*
- *Description of labs, technical equipment, and software relevant to the program.*
- *Examples of exams papers, practice final reports with evaluations*
- *Learning Agreements for Outgoing and Incoming mobile students.*
- *2024 updated curriculum for the Electronics Engineering study field*
- *Descriptor of the Engineering Study Field (approved by Order No V-964, 2015)*

## II. STUDY PROGRAMMES IN THE FIELD

### First cycle/LTQF 6

Title of the study programme	Electronics engineering	Computer engineering	Event engineering
State code	6121EX043	6121EX044	6121EX045
Type of study (college/university)	University	University	University
Mode of study (full time/part time) and nominal duration (in years)	Full-time, 4 years	Full-time. 4 years	Full-time, 4 years
Workload in ECTS	240	240	240
Award (degree and/or professional qualification)	Bachelor's degree in engineering	Bachelor's degree in engineering	Bachelor's degree in engineering
Language of instruction	Lithuanian	Lithuanian/English	Lithuanian
Admission requirements	Secondary education	Secondary education	Secondary education
First registration date	19/05/1997	15/05/2003	26/05/2015

### Second cycle/LTQF 7

Title of the study programme	Electronics engineering	Computer engineering	Telecommunications engineering
State code	6211EX050	6211EX051	6121EX052
Type of study (college/university)	University	University	University
Mode of study (full time/part time) and nominal duration (in years)	Full-time, 2 years	Full-time, 2 years	Full-time, 2 years
Workload in ECTS	120	120	120
Award (degree and/or professional qualification)	Master's degree in engineering	Master's degree in engineering	Master's degree in engineering
Language of instruction	Lithuanian/English	Lithuanian/English	Lithuanian
Admission requirements	1st cycle education	1st cycle education	1st cycle education
First registration date	19/05/1997	15/06/2007	14/06/2002

### 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.	Evaluation Area	Evaluation points <sup>1*</sup>
1.	Study aims, learning outcomes and curriculum	4
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
<b>Total:</b>		28

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

No.	Evaluation Area	Evaluation points <sup>2*</sup>
1.	Study aims, learning outcomes and curriculum	4
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	3
5.	Teaching staff	4
6.	Learning facilities and resources	3
7.	Quality assurance and public information	4
<b>Total:</b>		26

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<sup>1,2\*</sup>

**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
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#### FACTUAL SITUATION

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

The aims and learning outcomes of the study programmes in the Electronics Engineering field at VILNIUS TECH are explicitly (excellent) designed to meet the needs of Lithuanian society and the labour market. The SER outlines that the development and evolution of these programmes have been closely tied to national strategic documents, higher education quality requirements, and labour market trends. The university offers six study programmes, three at the first cycle and three at the second, each created in response to specific technological and societal demands. For instance, the Computer Engineering programme was introduced in 2003 due to rising demand for specialists in embedded systems and cybersecurity, while the Event Engineering programme launched in 2015 in response to a need for engineer's adept in temporary building technologies and event infrastructure. The SER provides detailed labour market insights, noting a strong demand for electronics engineers in Lithuania, as evidenced by major companies such as [TELTONIKA](#) IoT GROUP, UAB forecasting the need for over 4,000 engineers in the coming years. Additionally, the document highlights that VILNIUS TECH graduates are not only employed domestically but also find opportunities abroad, underscoring the international competitiveness of their qualifications. These outcomes validate that the programme aims, and learning results are carefully constructed to align with real economic and societal needs, ensuring that graduates are well-prepared for current and emerging challenges in the field of electronics engineering.

##### 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 Electronics Engineering study programmes at VILNIUS TECH are fully aligned with the university's mission to foster responsible, creative, and competitive graduates who are receptive to scientific progress and modern technologies. According to the SER, the development of these programmes follows the priorities set out in [VILNIUS TECH's 2021–2030 Development Strategy](#), which is itself grounded in national policy documents such as the "[Lithuania 2050](#)" progress strategy and European higher education directives. The first and second cycle study programmes aim to develop skills in engineering design, innovation, and project management, while promoting sustainable development, safety, and social responsibility, key objectives also emphasized in the university's strategic framework. Furthermore, the inclusion of internationalisation measures, such as offering studies in both Lithuanian and English and supporting mobility, aligns with VILNIUS TECH's strategic goal to increase its global academic presence. This strong correspondence between programme-level objectives and the overarching institutional goals demonstrates a coherent and purposeful integration of educational planning with the university's long-term mission.

## **ANALYSIS AND CONCLUSION (regarding 1.1.)**

The analysis of the aims and learning outcomes of the Electronics Engineering study programmes at VILNIUS TECH demonstrates a clear and sustained alignment with both societal needs and institutional strategy. The programmes have been carefully designed and periodically updated to reflect national labour market demands, technological developments, and evolving educational standards. Evidence from the SER, such as high graduate employability, direct collaboration with industry (e.g. TELTONIKA IoT GROUP), and historical responsiveness to market trends, confirms the practical relevance of the programmes. Simultaneously, the programmes are strongly integrated into the university's mission and long-term strategy, with clear links to institutional priorities such as innovation, sustainability, internationalisation, and lifelong learning. From the additional information provided as of September 2024, the curriculum for the Electronics Engineering programme has been updated. The revised structure includes specialized pathways in 'Design of Electronic Devices' and 'Computerized Electronic Systems', with modules such as 'Digital Signal Processing Tools', 'Systems on Chip', and 'Programmable Logic Devices'. These changes aim to better align student competencies with the evolving demands of the electronics industry and applied engineering fields. Each semester now includes an optimized mix of foundational courses, programming, signal processing, and practical laboratory work to support both theoretical and applied outcomes.

During the site visit it was discussed that the students in their third year can choose between different specialization subjects like signals or hardware, which helps attract them to areas they're passionate about. Staff emphasized the need to provide more inspiring and real-world tasks, often introduced via company collaborations or student professional practice. These are frequently developed into bachelor or master theses.

The programme aims and learning outcomes are appropriately formulated and well-grounded in both external labour market demands and internal strategic goals. This ensures that the study programmes are not only relevant and forward-looking but also consistent with the mission-driven development objectives of VILNIUS TECH.

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
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## **FACTUAL SITUATION**

### **1.2.1. Programmes comply with legal requirements**

The Electronics Engineering study programmes at VILNIUS TECH are fully aligned with national and international legal and regulatory frameworks. These include the Lithuanian Qualifications Framework (LQF) levels VI and VII for first and second cycle studies, respectively, and conform to European Higher Education Area (EHEA) guidelines such as the Bologna Process. The programmes are developed and updated based on multiple Lithuanian laws, ministerial orders, and university-specific regulations, ensuring relevance, consistency, and quality.

Each programme meets credit, structure, and content requirements, including mandatory internships, final theses, and research components. Curriculum Structure: First Cycle - 240 ECTS (including 15 ECTS internship and 15 ECTS thesis); Second Cycle - 120 ECTS (including 30 ECTS thesis and research projects).

Compliance is also demonstrated in teaching hours, distribution of subject types, and lecturer qualifications. The programmes follow the model study subject card format and adhere to internal university principles for curriculum design and delivery.

This compliance ensures that students receive education that meets professional and academic standards, supports international comparability, and provides a foundation for continued studies or professional practice.

From the additional information provided the programme learning outcomes are clearly mapped to the requirements outlined in the national 'Engineering Study Field Descriptor' (2015). The study plan ensures the development of competencies in engineering analysis, design, applied research, and ethical responsibility. For example, modules such as 'Mechatronic Equipment' and 'Digital Devices' address the need for practical application skills, while subjects like 'Engineering and Computer Graphics' and 'Project Management' develop design and organizational abilities. The integration of individual and team-based projects supports the development of personal, social, and lifelong learning skills.

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

The Electronics Engineering programmes at VILNIUS TECH demonstrate a strong and coherent alignment between programme aims, intended learning outcomes, teaching/learning methods, and assessment strategies. These aims are clearly defined and thoroughly detailed in SER, reflecting both academic and professional expectations. They distinguish the fundamental knowledge required in the first cycle from the more advanced, up-to-date knowledge targeted in the second cycle, ensuring relevance to industry and labour market demands.

The intended learning outcomes are structured progressively to guide students from foundational knowledge toward the development of complex competencies. Teaching and learning methods, such as lectures, laboratory work, project-based learning, case studies, and individual consultations, are analytically explained in the SER and further validated through discussions with academic staff and students. These methods are designed to promote active engagement and support the achievement of programme outcomes.

Assessment methods are likewise clearly outlined and purposefully aligned with learning outcomes. They include written and oral examinations, laboratory reports, individual and group assignments, presentations, and final thesis defences. The associated ECTS credits are correctly allocated, ensuring a consistent and effective learning experience that prepares graduates for further study or employment in the field.

Courses are distributed logically across semesters, ensuring progressive competence development. Students choose specializations in areas like Smart Systems, Telecommunications, and Embedded Systems.

### 1.2.3. Curriculum ensures consistent development of student competences

The curriculum is designed for holistic competence development. For students studying at the first and second year it focuses on mathematics, physics, programming, and fundamental electronics. For students at the third and fourth year it includes advanced topics, specialization, internships, and final thesis. For master's level the curriculum includes research-intensive projects, innovation management, and collaboration with scientific institutes.

Students benefit from Erasmus+ mobility options, personalized study plans, and elective courses tailored to emerging technologies.

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

The SER provides clear evidence that students in the Electronics Engineering field at VILNIUS TECH have multiple opportunities to personalise their curriculum in line with their individual learning goals. In the first cycle programmes, students choose from several specialisations beginning in their third year, which influence their course selections, final thesis topics, and career direction. Second cycle students select their specialisation upon admission and can further tailor their studies by choosing from elective subjects in the second and third semesters, such as Modern Electrical Drives, Algorithms and Data Structures, and Design of High-Frequency Circuits. Additionally, students select foreign language courses (English, German, or French) and elective modules like Ethics or Public Communication in early semesters. The SER also notes that students can pursue individual study plans with a maximum of 45 credits per academic year, allowing for flexible scheduling and content. These personalised options are facilitated through the VILNIUS TECH online system, ensuring transparency and accessibility. This flexible structure demonstrates the university's commitment to supporting diverse learning paths and outcomes tailored to student interests and future professional goals. The university demonstrates a supportive and flexible approach to accommodating students with special needs, both in terms of physical disabilities and broader learning challenges.

According to student feedback during the site visit, in the 3rd and 4th years of the bachelor's programmes, students are offered 2–3 optional courses that are available university-wide. These courses are not necessarily tied to the Electronics Engineering field but are part of the broader academic offer at Vilnius TECH.

From the site visit discussions, several specific mechanisms were identified:

**Individual Study Plans:** Students facing health issues or personal difficulties can request an individualized study plan. One student, for instance, underwent surgery and was unable to walk for two months. The university allowed this student to skip classes and exams for an extended period and complete all assessments later in the semester.

**Flexible Deadlines:** Professors are generally understanding and flexible regarding deadlines. They consider requests for extensions or adjusted evaluation timelines on a case-by-case basis, particularly in situations involving medical or psychological challenges.

**Psychological and Academic Support:** New students, especially first-year entrants, have access to psychological assistance and mentoring programs. These support systems help students adjust to university life and address any anxiety, stress, or learning-related barriers.

**Mentorship and Integration Camps:** The university organizes integration programs and mentoring for first-year students, which indirectly support students with hidden or undeclared needs by creating a more inclusive and guided environment.

**Accessible Communication Channels:** Students are encouraged to communicate openly with teaching staff, the Dean's Office, and administrative personnel to request support or accommodations. The environment is described as approachable and responsive.

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

The final theses (applied projects) in the Electronics Engineering programmes at VILNIUS TECH meet the standards established for their academic field and respective study levels. Both bachelor's and master's theses are designed to integrate theoretical foundations with hands-on application, aligning with Lithuanian Qualifications Framework levels VI and VII. Topics are often rooted in real-world challenges and shaped through collaboration with industry partners. As noted by a lecturer from the industry: "We focus on wireless technologies and embedded system designs. I lead the embedded systems course, and lab assignments as well as final projects are updated annually to reflect technological advances." This illustrates how current industry developments are directly embedded into student work.

The thesis development process is supported by structured academic supervision, methodological guidance, and ongoing assessment. Evaluation is conducted by a Degree Awarding Commission comprising academic and industry experts, ensuring each thesis meets both scholarly and professional benchmarks. This process positions the final thesis as a culmination of the student's education and a demonstration of their preparedness for the workforce.

Master's students working in industry frequently base their thesis topics on real R&D issues: students bring in real research problems from companies they work for. One example was a student who shifted from engineer to team lead during his studies and adapted his thesis to reflect new responsibilities in a different department. This shows alignment with both career progression and employer priorities.

Students can choose thesis topics and electives based on specializations such as:

- Smart Systems
- Microelectronics
- Telecommunications
- Event Technology (Events Engineering)

These reflect areas with strong labour market relevance to their final thesis. Program leaders also mentioned adjusting elective offerings in response to employer feedback.

### **ANALYSIS AND CONCLUSION (regarding 1.2.)**

The analysis of the Electronics Engineering programmes at VILNIUS TECH reveals a coherent, strategic, and well-substantiated approach to higher education that effectively bridges academic goals with practical societal and labour market needs. The programmes demonstrate a dynamic responsiveness to technological developments and economic trends, as seen in the introduction and evolution of study offerings tailored to national strategic documents and real-world demands. For example, the creation of specialized programmes like Event Engineering and Computer Engineering directly addresses niche yet critical industry needs. This illustrates a forward-thinking curriculum design rooted in evidence and continual feedback.

Moreover, the integration of programme aims with the university's broader mission reflects a deliberate and systematic alignment of institutional vision with academic execution. The use of modular and specialization options, updated course content, and collaboration with employers ensures that learning remains current and applied. The inclusion of elective pathways, flexible study plans, and support for students with varied needs strengthens the programme's inclusivity and adaptability. The curriculum's structure, spanning foundational to advanced topics, supports a logical

progression of skills development, and the pedagogical methods used are suitably matched to learning outcomes. Assessment strategies are thoughtfully designed to be both reflective and rigorous, ensuring that students not only acquire knowledge but also demonstrate their competencies effectively.

Final theses play a significant role in anchoring theoretical knowledge to practice, with many projects emerging from students' workplace challenges or industry collaborations. This approach enhances employability and relevance while fostering innovation. The university's engagement with external stakeholders and its openness to student feedback further affirm a culture of quality assurance and continuous improvement.

In conclusion, the programmes are not only compliant with legal and academic standards but also exemplify best practices in aligning education with evolving societal and technological contexts. They are structured to produce graduates who are competent, adaptable, and prepared for professional or academic advancement. The combination of strategic foresight, curricular depth, institutional coherence, and student-centred flexibility positions the Electronics Engineering programmes at VILNIUS TECH as robust and exemplary within the higher education landscape.

## AREA 1: CONCLUSIONS

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

### COMMENDATIONS

1. Strong industry ties, exemplified by partnerships with TELTONIKA and other tech firms and high graduate employability rates (>80% employed before graduation).
2. Effective use of modern teaching methodologies and digital platforms.

### RECOMMENDATIONS

#### For further development

1. Enhance English-language electives, especially in technical and interdisciplinary areas, to build on VGTU's strong international presence and academic appeal and curriculum flexibility for international students.
2. Formalize and expand partnerships with companies to co-develop project-based assignments and thesis topics, ensuring students work on current, real-world industry challenges throughout their studies.
3. Develop a structured framework for integrating guest lectures and workshops from industry professionals into core modules, particularly in specialization areas like Smart Systems and Embedded Technologies.

## **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
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### **FACTUAL SITUATION**

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

Vilnius Gediminas Technical University (VILNIUS TECH) demonstrates active engagement in scientific research closely linked to the Electronics Engineering study field. Study content and thesis topics are directly informed by current academic research, especially in areas such as embedded systems, digital signal processing, and power electronics. Lecturers confirmed that subject content and laboratory tasks are regularly updated based on their own research activities and technological developments in the field, including recent work on data transmission protocols and wireless technologies.

Students confirmed that thesis topics are often derived from real engineering problems, particularly in the master's programmes where many are already employed in industry. For example, students working in telecommunications and embedded systems companies adapt their job-related challenges into applied research for academic credit. These links ensure that final projects address current needs and reflect the university's scientific priorities.

Research outcomes are integrated into teaching through project-based learning and practical assignments. Courses such as Embedded System Design and Internet of Things incorporate the latest tools and methods based on industry trends. Academic staff involved in teaching are often active researchers, which allows them to incorporate new findings into lectures and laboratory sessions.

The university maintains cooperation with industrial partners, including companies in telecommunications, IoT, and chip design. Representatives from these companies participate in programme committees and regularly suggest curriculum updates based on emerging industry demands. Several teachers are themselves employed in leading firms, contributing their real-world experience to the academic environment. These close ties also help students secure professional practice placements and inform the choice of research topics.

Although the SER does not provide detailed projections, it was confirmed during meetings that study programme committees meet annually to review curriculum content and research integration. Adjustments are proposed in advance of each academic year and supported by departmental funding. Teachers are also encouraged to participate in training related to new teaching technologies and research methods. University-wide policies ensure staff remain familiar with recent advancements, including AI applications in electronics.

VILNIUS TECH's participation in European research programs such as Horizon Europe and Erasmus+ also reflects its capacity to sustain scientific activity. Between 2019 and 2023, the university coordinated or participated in 12 international projects. Students and staff benefit from these connections through shared research, joint supervision, and access to cutting-edge

knowledge. These efforts contribute to the financial and academic sustainability of research activities in the Electronics Engineering field.

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

VILNIUS TECH ensures that its study programs are closely aligned with modern scientific and technological advancements. Lecturers, who are also active researchers, incorporate their latest research findings into the curriculum. Many lecturers at VILNIUS TECH are also industry professionals who integrate recent developments into their teaching. Course content, especially in areas like embedded systems and wireless technologies, is updated annually to reflect advances in the field. Programme committees, which include industry representatives, review and approve these updates to ensure alignment with legal requirements, market needs, and technological trends. This close link between academic research, professional practice, and teaching ensures a curriculum that is both current and applied. Courses are regularly updated in accordance with legal requirements, market demands, and technological trends. Specific examples are provided above (2.1.1).

The integration of the latest developments in science and technology into the curriculum and various educational activities of the Electronics program is described clearly and convincingly. The methodology includes, among other elements, curriculum updates by teachers who incorporate recent advancements in their subjects, educational student projects proposed by faculty and researchers, participation in seminars, final theses on current technology topics, self-directed studies in the library, involvement in research projects, and contributions to publications. A list of final thesis projects is included in the SER, featuring topics related to the research activities of the university. Many of these projects are directly connected to the latest scientific and technological developments. Examples of final theses at the BSc and MSc levels include: “Development of Programmable Voltage and Current Source” (BSc) and “Forecasting of PV Power Generation” (MSc). It is noted that all curriculum changes related to new technologies must be approved by the Study Programme Committee and the Research Committee.

The university uses platforms such as Moodle to support blended learning, offering flexibility and access to a wide range of study materials. Social partners are actively involved in the study process, presenting real-world problems for students to solve, thereby ensuring that learning outcomes align with current industry practices.

Study programs comply with both Lithuanian and European frameworks, ensuring international relevance and competitiveness. Regular reviews and updates of study modules ensure that topics such as microcontrollers, telecommunications, and embedded systems remain up to date. During meetings, students indicated that they receive approximately 70 percent of content based on the newest technologies and 30 percent on traditional approaches. This is a very positive outcome, demonstrating a strong connection between the curriculum and the latest developments in science and technology.

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

Students at VILNIUS TECH are engaged in research activities aligned with their study cycle. Bachelor's and master's students participate in applied research through internships, course projects, and final theses, many of which address real-world challenges from industry partners. Master's students begin research activities from the first semester, supported by methodological guidance and access to modern laboratories and research infrastructure.

During the site visit, it was confirmed that many master's students are already employed in industry and often adapt workplace challenges into their academic research. Notable examples include

collaborations with companies such as Teltonika and an Israeli R&D firm, where students advanced from engineering roles to leadership positions while conducting applied research. In some cases, social partners co-supervise theses or provide consultancy, reinforcing the industry-academic link.

Annual programme committee meetings involving industry and alumni ensure that curriculum and elective content, such as in embedded systems or microelectronics, remain relevant to current research and market trends. Despite these positive practices, the university could strengthen this area by systematically documenting student participation in faculty-led or international research initiatives to provide clearer and more comprehensive evidence of research integration at the master's level.

## **ANALYSIS AND CONCLUSION (regarding 2)**

Academic staff at VILNIUS TECH actively participate in international committees and research initiatives, and they play a key role in updating the study programme in line with recent scientific and technological developments. Curriculum changes, particularly those involving the integration of new technologies, are reviewed and approved by the Study Programme Committee (SPC) and the Research Committee, ensuring academic and scientific alignment.

However, concrete evidence of sustained collaboration with external universities or international research institutions within the EU is limited. While the staff are involved in projects under programmes such as Horizon Europe and Erasmus+ (including KA2), their role appears modest and could be further strengthened. Enhanced participation in these initiatives would not only contribute to the academic depth of the programme but also support its financial sustainability.

Moreover, specific forward-looking plans for scientific activities directly related to the Electronics Engineering field, along with clear financial strategies for their implementation, were not clearly presented in the Self-Evaluation Report or during the site visit discussions. Strengthening these aspects would provide greater strategic clarity and reinforce the programme's research foundation.

## **AREA 2: CONCLUSIONS**

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

## **RECOMMENDATIONS**

For further improvement

1. Increase student participation in international scientific conferences and publications.
2. Strengthen focus on emerging fields such as AI, software security, and advanced telecommunications in the curriculum.

3. Implement regular annual reviews of study programmes to ensure alignment with the latest global scientific and technological trends.

### **AREA 3: STUDENT ADMISSION AND SUPPORT**

3.1. Student selection and admission is in line with the learning outcomes
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#### **FACTUAL SITUATION**

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

Admission to bachelor-level (first cycle) studies at VILNIUS TECH is governed by national and institutional regulations to ensure transparency, fairness, and accessibility. For Lithuanian students, admission is centrally regulated through the LAMA BPO system, which allocates both state-funded and self-funded study places. This centralized system ensures equal access to higher education institutions across Lithuania and applies consistent selection criteria. Candidates must have completed secondary education and passed at least one state Matura examination. Selection is based on a competitive score that incorporates subject-specific assessments and additional scores, the structure of which is available on the VILNIUS TECH website and within the LAMA BPO system.

VILNIUS TECH adheres to the rules of admission as approved by the Rector and follows guidelines set by the Ministry of Education, Science and Sport of the Republic of Lithuania. The university actively promotes its academic programs through multiple outreach activities such as "Open Doors Days," annual admission events, school visits, online platforms, and consultations in exact sciences. Faculty departments, such as those offering Electronics Engineering, engage directly with prospective students via school visits, remote lectures, and online channels like news portals and YouTube. Electronics Engineering attracts highly motivated applicants, many of whom list it as their first or second choice.

For international students, the admission process involves several additional steps. The International Office, in collaboration with faculty departments, manages the application process. Candidates submit academic documents, which are reviewed for compliance with entry requirements. Particular attention is paid to verifying academic backgrounds from certain countries to maintain consistent academic standards. A motivation interview, usually conducted by the head of department or designated academic staff, assesses the applicant's readiness for the selected program.

Admission to master's-level (second cycle) programs at VILNIUS TECH also includes document verification and a competitive selection process. Both Lithuanian and international applicants are evaluated based on the relevance and quality of their prior education. Many applicants bring industry experience and are already employed in engineering roles at the time of admission. The process typically involves three stages: consultations, an online application, and a provision for appeals.

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

VILNIUS TECH has established procedures for the recognition of foreign qualifications and prior learning experiences. Since 2015, the university has been authorised to academically recognise higher education qualifications obtained in foreign countries. The Centre for International Studies, in collaboration with faculty Dean's Offices, manages the assessment and recognition process for international students. The university allows for the transfer of credits from previous studies, enabling students to personalise their learning paths. Applicants may transfer up to 75% of their study programme. VILNIUS TECH also recognises non-formally acquired competencies, aligning with its

commitment to lifelong learning. The university credits study results from Lithuanian and foreign higher education institutions, as well as internships. In 2022, VILNIUS TECH processed 412 academic recognition cases from 41 countries. The number of international students pursuing full-course Electronics Engineering studies has been increasing, from 24 in 2021-2022 to 40 in 2023-2024.

According to SER. VILNIUS TECH study results are credited to those who have studied or are studying in Lithuanian or foreign higher education institutions according to higher education study programs and to those who wish to continue with their studies – their previous study results at VILNIUS TECH are credited, as well as to those who completed internships in a foreign company. The process is clearly described in the Description of Crediting of study results at the Vilnius Gediminas Technical University. confirmed by the university Senate. The university also recognises non-formally acquired competences and in accordance with the “Procedures for the assessment and recognition of competences acquired through non-formal and informal means”, developed in 2020.

### **ANALYSIS AND CONCLUSION (regarding 3.1.)**

VILNIUS TECH demonstrates a robust and transparent student admission system that aligns with national standards and learning outcomes. The centralized LAMA BPO system streamlines the process, and readily available information ensures clarity for applicants. The established mechanisms for recognizing foreign qualifications and prior learning promote inclusivity and cater to a diverse student body. The university actively promotes its programs and admission criteria through various channels, and a significant portion of enrolled students are highly motivated.

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

#### **3.2.1. Opportunities for student academic mobility are ensured**

VILNIUS TECH provides various opportunities for international academic mobility through Erasmus+ and bilateral agreements covering 34 countries. The university actively supports mobility by informing students early through promotion campaigns, with the International Relations Office and faculty coordinators offering guidance on applications and procedures. Over 90% of international experiences are funded by Erasmus+, and the university also awards scholarships for study in priority Asian countries. It is recognised nationally for its success in Erasmus+ international credit mobility funding.

Despite these opportunities, it was confirmed during meetings that none of the bachelor’s students in Electronics Engineering had participated in Erasmus+ physical mobility. However, students expressed high satisfaction with **blended mobility**, which combines online learning with short physical visits abroad.

Financial limitations, personal obligations, and social factors were cited as key reasons for low participation. In response, VILNIUS TECH has developed a strategy to promote **internationalisation at home**, particularly in countries with low outbound mobility. This includes engagement in joint activities with incoming students, internationalised coursework, and the awarding of **incentive points** for participation. Students confirmed these initiatives are well received and contribute meaningfully to their academic experience.

Statistical data in the Self-Evaluation Report show that outgoing mobility declined during the

pandemic but has since increased, from 7 students in 2021 to 15 in 2024. Common destinations include Spain, Portugal, Greece, and Germany. In Electronics Engineering, incoming Erasmus+ students represent 12% of the first cycle and 10% of the second cycle, contributing to a diverse and international academic environment.

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

The university offers a multifaceted support system designed to cater to the diverse needs of its students. Academic support includes mentorship programmes, comprehensive learning materials on Moodle, and accessible consultations with faculty. Financial aid is available through various scholarships based on merit, social needs, and external company sponsorships, which also foster industry connections. Students have many opportunities to receive various scholarships established by the university and the state. In addition, some company-established scholarships are specifically for students in particular study programmes, which helps to attract or motivate students. The university website provides all the necessary information for students about scholarships, their amounts, which faculty or study programme the scholarship is intended for, and about the company that established the scholarship. Additionally, contact information is provided for students with questions about who to reach out to.

At the site visit it was discussed that first-year students receive strong transitional support through mentoring, integration camps, and psychological services. Administrative responsiveness was highlighted positively, especially for those needing academic schedule adjustments.

Social support encompasses dormitory services and active student representation. Information about dormitories, their quality, price, rules, and other details is easily accessible on the university website. It's also a significant advantage that the university provides information for students who do not wish to live in the dormitories; on the website, you can find offers for student accommodation from VILNIUS TECH partners. The Student Representation actively engages in university activities and cherishes long-standing traditions within the university. Students can contribute to various university bodies, purposefully representing the student voice.

Recognizing the importance of well-being, the university provides psychological counselling and promotes personal development through the Sports and Arts Centre. There are approximately 8,200 students studying at Vilnius Tech University, while only two psychologists work at the university. Consequently, the waiting time for a psychologist consultation is about a month, and there is no additional time allocated for urgent situations. The university provides strong student support services to facilitate a smooth transition into university life. For example, the Dean's Office is known for its responsiveness; in one case, a student recovering from a sports injury was granted an individual study plan and exempted from physical attendance. Additionally, VILNIUS TECH offers psychological assistance and mentoring programs, further supporting student well-being and academic success.

A dedicated problem resolution system ensures that student issues are addressed efficiently. At the end of each semester, the higher education institution organizes mid-term surveys in which students can express their opinions about the semester's modules, lecturers, and quality. At the same time, the Student Representation actively participates in gathering student opinions and improving the quality of studies. The university's Lithuanian website is not linked to its English counterpart; each time you want to translate a specific section into English, it redirects you to the homepage, forcing you to search for the desired page again. This is a waste of students' time. On the studies and legislation page, there are 25 different documents available. In contrast, the English language page

only contains 15. Not all study documents have been translated into a foreign language.

### 3.2.3. Higher education information and student counselling are sufficient

VILNIUS TECH places strong emphasis on providing timely and accessible information and support to its students. According to students and staff during the site visit, first-year students benefit from a structured introduction, including integration week activities, introductory lectures, and guidance sessions that help them adjust to university life. This is supported by psychological services and mentoring programmes, which students described as helpful in easing the transition into higher education.

Academic counselling is well structured. Lecturers are required to offer two hours per week for student consultations, and additional consultations are available during designated consultation weeks each semester. Students confirmed that teachers are approachable and responsive when academic issues arise, including challenges related to exams, coursework, or absences.

Students also receive guidance on choosing specialisations and preparing final theses. Faculty members assist in aligning thesis topics with students' interests and potential career paths, particularly in the master's cycle, where many students bring real-world challenges from their workplaces into academic work.

In addition, company visits, and industry engagement activities are organised, particularly in the early stages of study. These help students understand labour market expectations and possible career directions. Students described communication with administration and faculty as effective, noting that the Dean's Office is especially responsive when individual academic or personal issues need attention.

### ANALYSIS AND CONCLUSION (regarding 3.2.)

Vilnius Tech has established a comprehensive and effective student support system that significantly contributes to maximizing students' learning progress and overall well-being. The university ensures ample opportunities for international academic mobility, enriching students' educational experiences and global perspectives. The provision of relevant and adequate academic, financial, social, and psychological support addresses the diverse needs of the student body, fostering a supportive learning environment. Furthermore, the university's commitment to providing sufficient information and accessible counselling services empowers students to navigate their academic journey successfully. While the self-assessment identifies areas for improvement in increasing international mobility participation, the existing student support framework demonstrates a strong commitment to student success. Another area for improvement is the collection of detailed statistical data on both outgoing and incoming mobility. For example, this could include the number of outgoing students per academic cycle, the duration of their stays, the subjects they choose, as well as the countries of origin and stay durations for incoming students. Additionally, information on language difficulties faced by first-cycle students would be valuable.

## AREA 3: CONCLUSIONS

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

## RECOMMENDATIONS

For further improvement

1. Improve the statistical information regarding outgoing and incoming student mobility.
2. Implement targeted initiatives to boost student participation in international mobility programs, short and long terms, by highlighting career benefits, offering flexible mobility options, and engaging alumni who have benefited from such experiences.
3. Ensure full availability and easy navigation of English-language academic resources.
4. Address the waiting times for psychological services by exploring options such as increasing staff capacity or offering additional digital mental health resources.

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

4.1.	Students are prepared for independent professional activity
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### FACTUAL SITUATION

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

At VILNIUS TECH, the teaching and learning process is designed to support the achievement of intended learning outcomes while addressing the diverse needs of students. Study programmes in Electronics Engineering, Computer Engineering, and Telecommunications Engineering apply flexible and varied teaching approaches across both bachelor's and master's levels. In addition to traditional lectures, students engage in discussions, project-based tasks, laboratory work, simulations, and case studies. Students described the learning environment during the site visit as interactive and well-aligned with practical applications.

At the site visit, it was discussed that many lecturers are also active industry professionals. They bring real-world experience directly into teaching and continuously update laboratory tasks and assignments with current technologies, such as embedded systems and Raspberry Pi. One lecturer confirmed that lab assignments are updated annually to reflect real changes in the embedded systems field, helping students stay aligned with professional trends.

Teaching is supported by the Moodle platform, which facilitates blended and distance learning, enabling greater flexibility. Students also confirmed that the teaching methods are adaptable and responsive to subject matter, supporting applied learning and critical thinking.

Assessment methods are also diversified and adapted to the nature of each course. These include exams, mid-term assessments, project work, presentations, and continuous evaluation. For instance, in the Event Engineering programme, staff from multiple departments jointly evaluate

student work to ensure consistency and balanced grading. At the master's level, assessment methods vary: some subjects emphasise written reports and project-based outputs, while others rely on traditional examinations. This flexibility ensures that evaluation methods are aligned with course content and learning outcomes.

Students receive structured academic support through mandatory participation in learning activities and access to consultations (minimum 32 hours per semester). They confirmed that lecturers are approachable and respond effectively to academic or personal challenges throughout the semester.

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

VILNIUS TECH takes practical steps to ensure that students with individual needs and from socially vulnerable groups have equitable access to higher education. During the site visit, students described positive experiences with support systems that respond to both health-related and personal challenges. In one case, a student who underwent surgery and could not attend classes for two months was granted an individual study plan, allowing them to complete coursework and assessments later in the semester. This demonstrates the university's flexibility in accommodating temporary or long-term personal difficulties.

Support is also available for students with learning difficulties or mental health needs. Psychological counselling services are provided, and first-year students are offered mentoring and integration programmes, which help them adapt to academic life and prevent isolation. Students confirmed that such support was effective in helping them feel connected and guided during the transition to university.

Academically, teachers are described as approachable and responsive. Individual consultation time is formally allocated each semester, and students can request adjustments or extensions when facing difficulties. Flexible teaching and assessment methods, such as shifting exam dates or offering alternative forms of evaluation, are available when justified.

While the SER briefly mentions physical infrastructure accessibility (e.g., for students with disabilities), more visibility around these provisions would strengthen transparency. Nonetheless, the feedback provided during meetings indicates that inclusive practices are applied in a case-by-case, student-centred manner, ensuring no student is disadvantaged due to social or personal circumstances.

### **ANALYSIS AND CONCLUSION (regarding 4.1.)**

The teaching and learning methods at VILNIUS TECH are well structured and reflect a strong alignment with intended learning outcomes. A range of teaching strategies, including lectures, project-based work, case studies, and simulations, are applied across study cycles. The inclusion of real-world technologies and frequent updates by lecturers who are also industry professionals ensures that learning is both relevant and up to date. The flexibility of assessment methods, including exams, mid-term reviews, project work, and team evaluations (as seen in Event Engineering), further supports the achievement of learning outcomes across diverse learning styles and subject areas.

Students confirmed that the learning environment is interactive, the teaching methods are adaptable, and academic support is accessible and effective. The integration of Moodle enables blended learning, increasing flexibility and engagement. Personalised study options, consultations, and continuous feedback mechanisms contribute positively to student success.

In terms of access for socially vulnerable groups and students with individual needs, VILNIUS TECH demonstrates a student-centred and inclusive approach. Evidence from the site visit shows that individual study plans, psychological counselling, and mentoring programmes are available and actively used. Flexibility in assessment and strong communication with staff support students facing health or personal difficulties. While some structural accessibility measures are noted, further transparency on facilities and formal policy implementation would be beneficial.

Overall, teaching and learning at VILNIUS TECH effectively enable students to meet programme objectives, while the inclusive academic environment reflects a strong commitment to student support and equity.

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

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

The monitoring of the progress of students is carried out at the levels of university, faculty and SPC. To achieve better results in the performance of students a “Student achievement Monitoring and Improvement Plan” is established. This plan is provided in detail in the SER, and it includes mainly a list of tasks to be achieved, tools and resources to be used and executors, staff and academic bodies which will be responsible for the implementation of this plan. For example, for the task “analysis of survey results”, is used the “organization of surveys” and the executors are the vice-deans of studies”. It is noted that among the tasks is included the promotion of students’ honesty for which appropriate actions are proposed. Another activity foreseen is the systematic collection of information on the academic performance of students over the last five years.

An important element for improvement of the quality of studies is the feedback process. Feedback is provided through systematic student surveys and the use of survey results to improve the educational system and the students’ progress. According to the procedure for organizing surveys at Vilnius Tech various mandatory surveys are provided. For example, a survey on the quality of teaching, survey about the implementation of the study programme, and others. Feedback for students is being improved on a regular basis. Teachers and administrative staff make evaluations of survey results, according to various criteria, and this information including ranking of the teachers is made available to students at the internal system account [mano.vilniustech.lt](http://mano.vilniustech.lt). In case that some negative trends emerge from the survey results for some members of academic staff, additional action can be initiated by Vilnius Tech which may include interview of the related teaching staff with psychologists, additional lecture supervision, advice on how to improve the teaching process and/or other actions if necessary.

### **4.2.2. Graduate employability and career are monitored**

Vilnius TECH monitors graduate’s employability and career paths through graduate surveys and employer’s feedback. The surveys are carried out on a regular basis, usually within one year after graduation, collecting the following data: employment status, relevance of the job to the field of study, further training. For example, in the Electronics Engineering Bachelor's program, students most often work as embedded systems engineers and programmers, testing engineers, quality control engineers, PCB designers, design engineers, and electronic equipment assembly engineers, etc. Upon completing their master’s studies, they often take on roles such as R&D engineers, RF engineers, system architects, product development specialists, project managers, and other

positions. Meanwhile, students studying or graduating from the Computer Engineering bachelor's program work as system and network administrators, database administrators, embedded systems engineers, production and quality engineers, programmers, etc. After completing their master's studies, they typically take positions as IT infrastructure engineers, cybersecurity analysts, Cloud infrastructure engineers, software development project managers, and other roles. Graduates of the Event Engineering bachelor's program work as sound and video engineers, event equipment technicians, event operators, stage engineers, and in many other positions.

Programme committees also consider feedback from student's internships and employer's comments after graduation to match employment needs.

Social partners contribute to the evaluation of the programme by providing feedback on the graduate's knowledge and adaptability to the real world. During the meeting, it was mentioned that the business is looking for graduates with a background in project management (e.g. agile, scrum), management knowledge and public speaking skills.

Vilnius TECH organises career fairs (<https://karjerosdienos.vilniustech.lt/en/>), guest lectures and company visits, giving students early access to employers; organises special seminars on career and job search; has Alumni club (<https://vilniustech.lt/361269>). Also follows careers by LinkedIn database: Vilnius Tech has now about 49,000 members of which mostly are alumni.

According to a survey of undergraduate and postgraduate students conducted by Vilnius TECH, the number of students who are already working and what positions they hold. For example, 29 out of 33 fourth-year students in Electronics Engineering are already working, i.e. 87%. Master's students in the master's programme in Engineering are employed (100%).

Graduates have clear opportunities for immediate employment in engineering companies or research institutions. They are highly valued and welcomed by businesses.

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

Vilnius Gediminas Technical University actively enforces policies that uphold academic integrity, foster tolerance, and prevent discrimination across its Electronics Engineering programs. The institution ensures compliance with national legislation and internal regulations, such as the Declaration on the Assurance of Equal Opportunities, and incorporates ethical standards in both study processes and academic conduct. Study program committees and university governance bodies promote inclusive education through transparent procedures and support mechanisms, ensuring a respectful academic environment for all students and staff.

In addition, the university requires teaching staff to attend regular training seminars on AI tools and digital technologies in education. These sessions help ensure that instructors remain informed about emerging tools, understand their pedagogical and ethical implications, and can provide clear guidance to students. Information about these seminars is distributed through internal university channels, and participation is tracked by faculty leadership.

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

VILNIUS TECH has a formal and transparent system for handling student appeals and complaints, with procedures available online and coordinated by designated university and faculty-level committees. Students can submit issues through an electronic reporting system or by email, depending on the type of concern.

During the site visit, students confirmed that they are aware an appeal procedure exists and that it can be accessed online. However, not all students were familiar with the specific steps or content of the procedure. This suggests that while the system is in place, its practical understanding and accessibility could be improved, particularly for first year and international students.

Over the past three years, very few formal appeals or complaints have been registered. While this may indicate a generally high level of student satisfaction, it could also reflect limited understanding or use of the process. To strengthen trust and access, the university may consider more actively promoting and explaining the procedure, for example during orientation events, via Moodle, or through student mentoring programmes.

Clear communication of both the availability and content of the appeals system would ensure students are fully informed and confident in exercising their rights.

### **ANALYSIS AND CONCLUSION (regarding 4.2.)**

VILNIUS TECH maintains an effective system for monitoring academic performance, ensuring academic integrity, and supporting students. Feedback mechanisms are well-established, and graduate employability is strong. However, transparency regarding employment data could be improved. The university is proactive in addressing modern challenges, such as AI usage in academics.

Overall, the teaching, learning, assessment, and graduate employment systems at VILNIUS TECH demonstrate a strong alignment with both educational standards and labour market expectations, while fostering an inclusive and ethical academic environment.

Continuous professional development is strongly encouraged through participation in teaching seminars and technological upskilling initiatives. Faculty regularly engage in training on innovative pedagogical methods, including project-based learning and digital teaching tools. Furthermore, teachers actively contribute to curriculum design, ensuring that study programs remain responsive to technological advancements and labour market needs. Collaboration with international partners further broadens the academic perspective and integrates global best practices into the study process.

Despite these strengths, feedback from students indicates a desire for an increased presence of international lecturers and industry experts, which would provide additional exposure to global practices and emerging technologies. Especially in the Master programme there is room for improvement in the involvement of students in research projects, using more high-tech equipment and applying cutting-edge technology. VILNIUS TECH acknowledges this and continues to strengthen ties with external stakeholders to enhance guest lecture opportunities.

## **AREA 4: CONCLUSIONS**

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

<b>Second cycle</b>			X		
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## COMMENDATIONS

1. The high employability rate of graduates, paired with the positive reception from employers, is a testament to the quality of education and the strong alignment between academic programmes and industry needs.
2. Career-oriented events and special workshops ensure that students are well prepared for the labour market, acquire skills, knowledge and make the right contacts for success.

## RECOMMENDATIONS

For further improvement

1. Increase industry expert involvement to strengthen real-world integration in teaching.
2. Actively promote and explain the appeals and complaints process, especially to first-year and international students.
3. Improve physical and academic accessibility in laboratories and learning spaces for students with individual needs.

## AREA 5: TEACHING STAFF

5.1.	Teaching staff is adequate to achieve learning outcomes
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### FACTUAL SITUATION

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

The teaching staff engaged in the Electronics Engineering study programs at VILNIUS TECH is well-qualified and sufficiently staffed to meet the intended learning outcomes across both first and second cycle studies. Faculty members include a balanced mix of university academics and industry professionals, ensuring that students benefit from both theoretical foundations and practical, real-world insights. This combination enriches the learning environment, aligning academic content with current industry trends.

A significant proportion of the teaching staff hold doctoral degrees, meeting and often exceeding national requirements, with over 50% of lecturers in undergraduate programs and over 80% in graduate programs holding scientific degrees. Additionally, more than 20% of courses are delivered by professors, ensuring academic leadership within the curriculum.

Faculty members typically possess extensive teaching experience, averaging over a decade, and many maintain active professional engagements outside academia. This dual involvement enhances the relevance of course content and fosters a practical understanding among students.

Continuous professional development is strongly encouraged through participation in teaching seminars and technological upskilling initiatives. Faculty regularly engage in training on innovative pedagogical methods, including project-based learning and digital teaching tools. Furthermore,

teachers actively contribute to curriculum design, ensuring that study programs remain responsive to technological advancements and labour market needs. Collaboration with international partners further broadens the academic perspective and integrates global best practices into the study process.

Despite these strengths, feedback from students indicates a desire for an increased presence of international lecturers and industry experts, which would provide additional exposure to global practices and emerging technologies. VILNIUS TECH acknowledges this and continues to strengthen ties with external stakeholders to enhance guest lecture opportunities

### **ANALYSIS AND CONCLUSION (regarding 5.1.)**

The qualifications, experience, and engagement of the teaching staff are well-aligned with achieving the learning outcomes of the Electronics Engineering programs. The involvement of industry professionals and international collaborations ensures contemporary relevance. Nonetheless, increasing the number of guest lecturers and balancing teaching workloads to allow more focus on research and mobility opportunities remain areas for ongoing improvement.

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

#### **5.2.1. Opportunities for academic mobility of teaching staff are ensured**

Vilnius TECH has a very wide range of international partners, and this creates favourable conditions for successful academic staff mobility exchanges in many countries, with funds from Erasmus+ programme and VUT funds. Twice a year VUT faculties carry out selections for Erasmus+ teaching and training visits to the EU and partner countries. From 2021 -23, there were 87 missions in 22 foreign countries. For example, Germany, Spain, Sweden and other EU countries and Egypt, India, Indonesia and other third countries. The organisation and support for the implementation of the staff exchanges by IRO are sound. The selection of staff for teaching is based on three main factors: The added value of the visit, experience of staff and first-time visits.

The teaching staff, on their return from the Erasmus+ programme, come back with significant added value in international teaching experience, collaborating with other foreign partners in other new laboratories and research environments and in acquiring new social culture from the new country. However, no specific information is provided regarding benefits and contributions to the scientific field of the local educational programme. The information also in the SER on new collaboration on research activities is limited. Besides Erasmus+, Vilnius TECH is also funding many trips in various countries to encourage participation of academic staff at important conferences and networking. More specifically the mobility visits include, Erasmus+ programme, Athena exchanges, Projects collaborations, Conferences participations, and others. All the trips of the above-mentioned missions are covered by the university with only exception the Erasmus+ programme.

The numbers of outgoing and incoming academic staff are outlined, and they are impressive. The outgoing staff is 17.2 % of the total number of teachers (134), and 23 different people from 9 countries joined the departments of the Electronics Engineering Studies. However, the share by academic position of all subject-teaching staff over the last 3 years of outgoing mobility has not been analysed or sufficiently elaborated.

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

Great importance has been given at Vilnius TECH for the educational and professional development of the academic staff. It is expected that academic staff competence development could effectively improve the quality of the study results of the students. For this purpose, the Vilnius TECH established the attestation system in which teachers undergo assessment of their scientific competencies. The competences are examined based on 20 indicators, and according to the results, teachers may have an additional part of their salary. This gives a strong motivation to the staff to improve systematically their competencies.

The university encourages staff to improve their academic development by acquiring experience in writing scientific articles, supervising projects, participating in conferences and mobility exchange programmes with foreign universities and being involved in other educational activities. Professional development will be further improved with training in various topics. Vilnius TECH academic staff is offered opportunities to have training in different forms, like individual consultations, seminars, etc. The training is offered by 3 teams of the Academic Support Centre. In purpose to improve the level of knowledge of the English language, the university organises English language courses in which half of the fees, or the full fee is covered by the university.

### ANALYSIS AND CONCLUSION (regarding 5.2.)

The Erasmus+ outgoing and incoming mobility of the academic staff is at very good level. This is very helpful for the professional development of the teachers and for the cooperation of the university with foreign external partners in scientific research and educational collaboration.

However, the benefits regarding the study programme, resulting from the staff mobilities, are not sufficiently explained. For example, there was not clear information about transfer of knowledge acquired during the visits, related to their teaching subjects or laboratory equipment.

Vilnius TECH provides very good and sufficient opportunities to the academic staff to develop their professional status. The university includes the improvement of educational and research competences of the academic staff, in the criteria for upgrading the academic position, and this increases the motivation of the staff for further development.

## AREA 5: CONCLUSIONS

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

### RECOMMENDATIONS

For further improvement

1. Establish structured processes to enhance the capacity to acquire knowledge through academic mobility and implement it to the educational programs (e.g., post-visit seminars, integration into coursework).

2. Provide detailed reporting on staff mobility, including academic positions and contributions to the study programme.

3. Strengthen links with external stakeholders to enhance guest lecture and collaboration opportunities.

## **AREA 6: LEARNING FACILITIES AND RESOURCES**

6.1.	Facilities, informational and financial resources are sufficient and enable achieving learning outcomes
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### **FACTUAL SITUATION**

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

Detailed information on the lecture rooms and teaching laboratories of the faculty and for the Electronics and Telecommunication Technology study program are provided. The means and equipment used for the study programme under evaluation, including hardware and software, are adequate for the current number of students and suitable to achieve the LO even in cases of remote study, like the period of COVID-19 pandemic. The purchase and use of suitable emerging technology equipment could improve the knowledge and implementation of electronic projects in high tech applications and thesis of MSc students. For example, the number of existing FPGA digital circuits is limited. Auditoriums are very well equipped and suitable for the organisation of specific scientific or related events inviting students, technicians and other interested external audience.

Great effort has been made by Vilnius TECH to provide suitable facilities and equipment adapted to the needs of people with disabilities. Besides the building arrangements, special software and hardware, specialised furniture and various appropriate tools have been provided to help create an adequate environment for students with disabilities. It is expected that the adaptation and improvements should continue in the future.

The possibility for students to work from home using the facilities of the university is clearly explained and is adequate. Students can use the remote access VPN service from home for implementation of their studies.

Sufficient information is provided regarding the availability of teaching material in the HEI's library as well as the suitability of the reading rooms.

Detailed information on the number of printed publications (97000) and database subscriptions to more than 535000 e-books, standards and almost 32000 titles of e-journals is provided in the SER. To provide the research and study process with the relevant information sources, VUT spends more than 425,000 euros per year on the acquisition of various publications.

At the site visit the students reported about modern lab facilities and positive experiences with the new buildings. Dormitory access was described as well-managed, with clear allocation procedures and good conditions.

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

The classrooms, laboratories, and IT infrastructure available for delivering the study programmes in Electronics Engineering at VILNIUS TECH are adequate and meet the needs of both teaching staff

and the expected student population. The hardware and software resources effectively support teaching and learning processes, while the university's library ensures solid access to printed books, e-books, and academic publications. Facilities have been adapted to accommodate students with disabilities, with commendable efforts made in this area, though ongoing improvement is encouraged. Students also benefit from the ability to access certain university resources remotely, including the library, to support their studies. However, the library's collection of up-to-date English-language academic texts remains limited, potentially restricting access to the latest international research and literature in the field. Some of the hardware laboratories could require upgrading to latest technology equipment and software.

Also, students stated that the university provides technical rooms with PhD mentors and technicians where students can work on individual projects, helping them transform ideas into applied prototypes.

### **ANALYSIS AND CONCLUSION (regarding 6.1.)**

There are hardware and software facilities to help students work remotely and have access to e-books and publications. Some lecture rooms like auditoriums are suitable for the organisation of specific scientific or information events for external interested people. For example, a speech about AI for specialised or non-specialised interested people.

From the visit in the library, it is estimated that there is room for improvement in the purchase of recent printed English books in the field of Electronics.

From additional information provided and following the 2024 curriculum update, the university has enhanced its laboratory infrastructure to support new modules such as 'Microwave Technology', 'Systems on Chip', and 'Digital Signal Processing Tools'. These facilities are equipped with modern instrumentation, software, and computing resources, ensuring that students receive training aligned with current industry standards. However, some of the hardware and software laboratories require to be upgraded to the latest technology, adequate to requirements at the second study degree.

## **AREA 6: CONCLUSIONS**

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

### **RECOMMENDATIONS**

For further improvement

1. Modernize equipment with Industry-Relevant Technologies, ensuring proper level of software and hardware equipment at the second cycle study degree.
2. Encourage the university to organise in the suitable existing learning facilities, scientific or related events for outreached people.

## 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
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### FACTUAL SITUATION

#### 7.1.1. Internal quality assurance system for the programmes is effective

VILNIUS TECH has established and effectively maintains a robust internal quality assurance (IQA) system for its Electronics engineering study programs. This system is not merely a formality; it actively ensures the continuous improvement of academic standards. The IQA system is rooted in a clear, publicly available quality policy, which is deeply integrated into the university's operational framework, ensuring that quality assurance measures are well-defined and their scope is clear. This comprehensive approach is informed by the VILNIUS TECH Statute, European Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG), Lithuanian higher education regulations, and internal legal acts.

The IQA system is strategically distributed across different organizational levels, involving key decision-making bodies at both university and faculty levels. At the university, the Study Committee, Rectorate, and Senate provide strategic oversight, while at the faculty level, the Study Program Committee (SPC), Faculty Study Committee, and Faculty Council are instrumental in program-specific quality management. The SPCs, composed of faculty members, students, and social partners, play a pivotal role, meeting regularly to review curriculum relevance, teaching quality, and study outcomes. This multi-tiered structure, supported by comprehensive documentation detailed in Annex 8, ensures objectivity and diverse perspectives in quality management. A crucial aspect of this system is the continuous monitoring of each program throughout the academic year, with annual amendments implemented each spring. These updates are directly informed by course evaluations collected from students at the end of each semester, ensuring programs remain aligned with technological advancements, labour market needs, and educational best practices. While the IQA system is comprehensive, enhancing transparency regarding how student feedback is utilized would further improve trust and engagement.

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

The effectiveness of VILNIUS TECH's internal quality assurance system is significantly bolstered by the active and systematic involvement of diverse stakeholders, including students, teaching staff, employers, and alumni. Students are deeply integrated into faculty activities; their representatives are delegated to the Dean's office, faculty competitions and attestations commission, faculty council, and faculty study committee. This provides formal platforms for students to voice opinions and influence study quality. Student feedback, collected through structured anonymous surveys each semester, focuses on teaching clarity, content relevance, and assessment transparency, with results directly reviewed by the SPC and used for program improvements, such as the introduction of more project-based learning or module resequencing.

The involvement of employers and social partners is direct and continuous. Companies like Teltonika, Light Conversion, Yukon Advanced Optics Worldwide, 8devices, Lifodas, Fima, Telia, Bite, Tele2, and Scenos techninis servisas regularly provide information, jointly develop thesis topics, and suggest practical changes to ensure studies meet market needs. Employers and social partners are actively involved in SPCs, curriculum reviews, internship organization, and mentoring student projects. They also contribute to external evaluations and accreditation preparations, providing a

modern industrial perspective. Faculty members, including those not in administrative roles, contribute through department meetings and by updating course materials based on discussions with colleagues. Close relationships with these industry partners facilitate professional internships and post-graduation employment opportunities. The VILNIUS TECH Electronics Faculty Alumni Club, chaired by Dr. Artūras Medeišis, actively engages graduates through regular lectures and discussions, providing invaluable feedback on required market competencies. While stakeholder involvement is strong, discussions with social partners revealed a low number of women in electronics engineering, indicating a need for dedicated efforts to attract young women to the field.

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

VILNIUS TECH maintains a comprehensive approach to collecting, utilizing, and publicly disseminating information regarding its Electronics Engineering study programs, their evaluation, improvement processes, and outcomes. Information is systematically gathered through internal quality assurance mechanisms and external evaluations. The Study Programme Committees (SPCs) regularly collect feedback from students, alumni, and social partners via structured surveys and consultations, focusing on curriculum content, teaching quality, and graduate employability. This data is reviewed in SPC meetings and directly informs curriculum updates, teaching improvements, and strategic planning.

External evaluations, such as those conducted by the Centre for Quality Assessment in Higher Education (SKVC), are fully integrated into improvement processes, exemplified by recent updates to programming subject descriptions and the introduction of a new modular program in response to expert recommendations. The objectives and results of the study programs are meticulously published on the official VILNIUS TECH website, ensuring transparency for all stakeholders. This critical information is also integrated into the university's internal information system and recorded in graduate diploma supplements. To enhance accessibility for a broader audience, the VILNIUS TECH website is linked from widely visited educational platforms like the Open information, counselling and guidance system (AIKOS) and Lithuania's association of higher education institutions for the organization of general admission (LAMA BPO). Internally, all program implementation information is stored in the VILNIUS TECH information system "Alma Informatika," complemented by data collection at departmental levels and the Studies Directorate. A university-level document management system, active since 2019, centralizes critical documents. Faculty administration and academic staff extensively utilize the VILNIUS TECH information system ([is.vilniustech.lt](http://is.vilniustech.lt)) with specialized subsystems for study program management and student data. Since 2023, data are also leveraged in the [analitika.vilniustech.lt](http://analitika.vilniustech.lt) system to monitor program, study group, and individual student progress, enabling targeted mentoring and dropout prevention. This integration significantly facilitates efficient study implementation and information management.

#### 7.1.4. Student feedback is collected and analysed

VILNIUS TECH employs a systematic and multi-faceted approach to collecting and analysing student opinions on study quality, integrating both qualitative and quantitative measures. Feedback is gathered consistently each semester from students concerning course quality and lecturer teaching effectiveness. A broader perspective is obtained through a graduate survey conducted every three years, assessing their perceptions of studies and career trajectories. All collected data are rigorously analysed by the Study Program Committee (SPC) and cross-referenced with other quality data.

Recent student surveys indicate predominantly positive sentiment, with 80-90% of students agreeing with quality statements. While a small percentage (5-10%) disagree, deeper analysis reveals these are generally individual concerns, not tied to specific subjects. To address this, VILNIUS TECH proactively organizes additional meetings with students to discuss survey results and elicit specific complaints and suggestions, both at faculty and program levels. These discussions clarify student perceptions on innovative methods, study load, and communication. Student feedback is integral to lecturer attestations and contract renewals; negative evaluations can impact eligibility. Over the past three years, more than 30 lectures have been monitored, leading to discussions in two cases about improving competencies or methods. Recent graduate surveys show the Electronics engineering bachelor's program rated as "good" (8 out of 10), with 82% of graduates feeling they acquired specialized knowledge and general skills. A nuanced finding is that students working during studies tend to rate quality lower, often citing a lack of in-depth knowledge in specific work-related areas. Conversely, other graduates highly value the programs' broad profile. Students on individual plans often give higher evaluations, linking satisfaction to knowledge, lecturer competencies, communication, environment, and flexibility to combine studies with work.

**ANALYSIS AND CONCLUSION (regarding 7.1.)**

VILNIUS TECH has demonstrably established a well-structured and highly responsive internal quality assurance system for its Electronics engineering study programs, actively engaging a diverse range of stakeholders and supporting continuous improvement. The commitment to quality is evident in its publicly available policies and multi-tiered governance involving university-level bodies and faculty-level committees like the SPC. This structure ensures comprehensive oversight and continuous program improvement, with annual curriculum updates directly informed by feedback. The integration of student feedback into curriculum development is a key strength, with high satisfaction rates (80-90% agreement on quality statements) indicating overall program effectiveness. While efforts to enhance transparency around how specific student feedback leads to program changes would further improve engagement, the proactive approach of organizing additional meetings and providing support for lecturers demonstrates responsiveness.

The collaboration with industry partners, including over a dozen prominent companies, is a significant asset, ensuring that programs remain relevant and aligned with labour market needs through internships, thesis topics, and direct employer involvement in curriculum review. The active participation of the Alumni Club further enriches this feedback loop by providing insights into market competencies. Information on programs, evaluations, and outcomes is comprehensively collected, efficiently managed through the "Alma Informatika" system and the analitika.vilniustech.lt platform, and made readily accessible to the public via the university website and national educational platforms. This ensures transparency and data-driven decision-making. While the foundation for quality assurance is solid, ensuring broader accessibility of regulatory documents and evaluation reports in English and searchable formats would enhance public accountability. Additionally, efforts to promote diversity, particularly addressing the gender imbalance in electronics engineering through targeted initiatives, remain an area for continued focus.

**AREA 7: CONCLUSIONS**

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

## **RECOMMENDATIONS**

For further improvement

1. Improve transparency by clearly communicating how student feedback influences program changes and publicly disseminating aggregated, anonymized survey results.
2. Ensure broader accessibility of regulatory documents and evaluation reports in English and in searchable formats.
3. Promote successful alumni and their companies through success stories on the VILNIUS TECH website and social media to motivate current students.

## V. SUMMARY

Vilnius Gediminas Technical University (VILNIUS TECH) demonstrated a commendable level of preparedness throughout the evaluation process, particularly through its comprehensive self-assessment report and the well-organized site visit. The review panel extends sincere gratitude to the University for its openness, active engagement in discussions, and commitment to continuous improvement.

### **Strengths**

VILNIUS TECH's study programs in Electronics Engineering and related fields are well-aligned with both societal needs and labour market demands. The curriculum is dynamic, regularly updated to reflect advancements in fast-evolving areas such as Artificial Intelligence, Internet of Things, and embedded systems. The clear structuring of subject cards ensures transparency in learning outcomes, credit allocation, and assessment methods. The integration of flexible elective options supports personalized learning paths, enhancing student engagement.

A significant strength lies in the University's strong connection between research and teaching. Active participation in international research initiatives like Erasmus+, Horizon Europe, and COST projects underlines VILNIUS TECH's commitment to fostering an environment where applied research thrives. Both staff and students benefit from involvement in interdisciplinary projects, often in collaboration with industry partners, resulting in practical outputs such as prototypes and startups.

Student support mechanisms are robust, encompassing academic mentoring, psychological services, and peer tutoring. The University's focus on internationalization is evident through mobility opportunities and participation in global academic events. Admission processes are transparent, ensuring that both local and international students are selected fairly.

Graduate employment rates are exceptionally high, reflecting the University's success in preparing students for the workforce. Employers particularly value the adaptability and strong theoretical grounding of graduates. Teaching staff are a blend of academic experts and industry professionals, ensuring that students benefit from both scholarly insight and real-world experience. Continuous professional development for staff further strengthens teaching quality.

Learning facilities, including modern laboratories, digital infrastructure, and access to scientific databases, are well-regarded by students. Collaborations with industry partners enhance practical learning through internships and prototype development opportunities. The University's active internal quality assurance system ensures that feedback loops lead to tangible improvements in study programs.

### **Areas for Improvement**

Despite these strengths, certain areas present opportunities for enhancement. While the theoretical foundation of the curriculum is strong, students expressed a desire for earlier integration of practical components, particularly in the first years of study. Additionally, English-language programs could benefit from a broader selection of elective courses to match the flexibility offered in Lithuanian-taught programs.

Employers highlighted the need for improved practical laboratory skills, especially in areas such as Electromagnetic Interference (EMI) and Electromagnetic Compatibility (EMC), as well as project management competencies. Expanding hands-on learning opportunities and reinforcing these aspects within the curriculum would further strengthen graduate readiness.

Although psychological support services are in place, current waiting times of 3-4 weeks suggest a need for increased capacity to better support student well-being.

In terms of quality management, while course evaluations are actively used to inform curriculum updates, students indicated that communication regarding how their feedback leads to change could be more transparent.

Finally, while VILNIUS TECH has made commendable efforts in promoting engineering studies, particularly among underrepresented groups, continued focus on addressing gender imbalance in technical fields remains important.

## **Conclusion**

The review panel acknowledges VILNIUS TECH's dedication to high academic standards, strong industry connections, and commitment to continuous development. We thank the University for its thorough self-evaluation and for fostering a constructive atmosphere during the site visit. The institution is well-positioned to further enhance its programs by addressing the identified areas for improvement, ensuring continued success in educating competitive and innovative engineering professionals.