# ANALYSIS OF THE STRATEGIC ENVIRONMENT OF THE FACULTY OF ENGINEERING

ANALYSIS OF EXTERNAL ENVIRONMENTAL FACTORS (PESTET) THAT MAY INFLUENCE THE ACTIVITIES OF THE FACULTY OF ENGINEERING IN 2025-2027

| Groups of factors | Factors and their expression | Potential vector of impact | Evaluation (on the 5-point scale)* |
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| Political factors | Agriculture and forestry policy (BŪŽP 2021-2027), European and national research programmes are associated with the EU's Green Deal policy, climate change mitigation, agriculture, sustainability. This requires scientific research, on the basis of which innovations and new competences are created. | Possibility | 5 |
| | European and national research programmes give priority to funding green course and bioeconomy research (Horizon Europe, etc., green course policy strategies "From Farm to Fork", "Sustainable Agriculture", "Biodiversity Strategy" and others). | Possibility | 5 |
| | The priorities of the Lithuanian Government for 2025–2028 – green transition, digital transformation, international cooperation – are in line with the mission of the Faculty of Engineering. The Faculty of Engineering can play a significant role in the preparation of the planned National Bioeconomy Development Plan through scientific research and competence development. | Possibility | 4 |
| | Agriculture and related sectors are increasingly recognized as priorities in terms of national security, with more attention being paid to their resilience to crises, pandemics, international competition, etc. | Possibility | 4 |
| | The target of reducing the gap between scientists' salaries and the national average by 30% has not been achieved. The current government program continues to pursue the goal of competitive salaries for researchers, but does not specify the exact amount of the increase. A gradual increase in salaries is planned until 2030. | Possibility | 3 |
| | The national policy for training specialists in agriculture has so far only partially reflected the needs of the agricultural sector, although there are signs of change at the discussion level. | Threat | 4 |
| Economic factors | The bioeconomy is becoming a key priority for EU and national economic policy. There is a growing need for science, innovation, sustainable food supply, and climate neutrality. | Possibility | 4 |
| | Although the growing global demand for food remains a pressing issue, the ability of the Faculty of Engineering at the Academy of Agriculture to have a direct impact depends on its ability to integrate into international food security, agroecology, and sustainability initiatives. | Possibility | 2 |
| | The demand for specialists in the agricultural and water engineering sector is 2-3 times higher than the number of specialists being trained. | Possibility | 5 |
| Social factors | The demographic situation in Lithuanian regions is deteriorating, with a declining concentration of young people in rural municipalities. This limits the number of applicants to the programs offered by the Faculty of Engineering at the Academy of Agricultural. | Threat | 4 |
| | Agricultural studies remain insufficiently attractive to high-achieving young people, especially in engineering fields. | Threat | 3 |

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| | It is still difficult for high school graduates from peripheral regions and rural municipalities to compete for state-funded places, as their academic achievements are often poorer due to differences in social and educational environments. | Threat | 3 |
| Technological factors and science | The accelerating pace of technological progress in agriculture and forestry- digitization, automation, sustainable processing technologies, and precision farming - is fundamentally changing the sector, prompting the Faculty of Engineering at the Academy of Agriculture to adapt its study and teaching/learning content more rapidly. | Possibility | 5 |
| | Modern technologies are becoming increasingly established in study and research processes – virtual learning environments, simulations, AI solutions, new didactic models. This requires consistent strengthening of the competencies of teachers and researchers, especially in the field of AI application. | Possibility | 4 |
| | Due to long-term systemic challenges (funding, organization of doctoral studies, lack of management resources), problems with the quality of training for young scientists and their professional integration are still evident. | Threat | 3 |
| Ecological factors | Based on the green course policy, priority attention is given to agricultural ecology through digitization, precision farming, forestry, the "return to nature" of agricultural areas, biodiversity conservation, ecological forestry, urban forestry, and ecological lifestyles. This shapes new research priorities and competence development needs for the Faculty of Engineering at the Academy of Agriculture. | Possibility | 4 |
| Legal factors | The conditions for admission to state-funded bachelor's degree programs remain restrictive for applicants to study programs in the agriculture, forestry, and water management sectors - the grading scales and funding allocation principles do not take into account the strategic national priority of these programs. | Threat | 3 |

*Evaluation on the 5-point scale:

- very important opportunity – 5 points, ..., unimportant opportunity – 2 points;
- very important threat – 5 points, ..., unimportant threat – 2 points.

ANALYSIS OF THE INTERNAL FACTORS OF THE FACULTY OF ENGINEERING FOR THE PREPARATION OF STRATEGIC ACTIVITIES FOR THE PERIOD 2025-2027

| Groups of factors | Factors and their expression | Character | Evaluation (on the 5-point scale)* |
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| Scientific research | A breakthrough has been achieved in the publication of research results in international scientific journals with an impact factor | Strength | 4 |
| | Leadership at the national level, partly also at the international (regional) level in the field of bio-economy development research is emerging | Strength | 4 |
| | Modern and high-quality laboratory and scientific equipment ensures the high quality of research and study processes and contributes to the university's competitiveness at the national and international levels | Strength | 4 |
| | Positions in national and international scientific projects are being strengthened – initiative and the scope of partnerships are growing noticeably. | Strength | 2 |
| | Different involvement of teachers and researchers in research, in terms of systematicity, consistency, depth of research and scientific achievements | Weakness | 3 |
| | Emerging problems of quality training and adaptation of young scientists | Weakness | 3 |
| | The insufficient degree of the use of laboratory and other scientific equipment | Weakness | 2 |
| | The participation of the Faculty of Engineering of the Academy of Agriculture in international scientific platforms is still insufficient, but targeted partnership development and purposeful positioning in priority areas have been initiated | Weakness | 1 |
| Studies | Leading positions in the country (the only university institution) in training agricultural engineering, soil moisture regulation, land use planning specialists (LTQF level 6 and 7) for agriculture and water management | Strength (along with weakness) | 4 |
| | Modern and attractive study infrastructure (auditoriums, laboratories, audiovisual equipment) | Strength (along with weakness) | 4 |
| | By implementing a study model based on the principles of artes liberales, students of the Faculty of Engineering at the Academy of Agriculture are provided with a strong environment for developing cognitive, individual, and social skills, which becomes a distinctive aspect of the quality of studies and value identity | Strength | 4 |
| | Targeted and coordinated initiatives in study marketing, programme promotion and the publication of study results strengthen the visibility and attractiveness of the academy | Strength | 4 |
| | Study programs are being updated, interdisciplinarity is being developed, future competencies are being integrated, and modern educational technologies are being applied, although the pace of these processes could still be accelerated | Strength | 2 |
| | The university has a centralized graduate employment monitoring system in place – graduate surveys are conducted, and the SPK analyses and evaluates graduates' career paths, but the monitoring results are not yet fully integrated into decisions on improving the quality of studies | Strength | 1 |

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| | There has been a critical decline in the number of students enrolled in first-cycle study programs designed to develop competencies in the fields of land and water management engineering. Over the past three years, the number of students in first- and second-cycle studies has decreased by 10%. First-cycle study programs in hydraulic engineering, land use planning, and some other engineering fields have practically disappeared | Weakness | 3 |
| | Low profitability of first-cycle engineering study programs | Weakness | 3 |
| | No foreign students attracted to consecutive studies – development potential untapped, despite strengthening marketing, partnership, and English-language program initiatives | Weakness | 2 |
| | Student participation in international academic exchanges, research, educational activities, and volunteering remains limited, although positive trends are noticeable. | Weakness | 2 |
| | Insufficient quantity and utilization of high-quality study infrastructure (lecture halls, laboratories, etc.) in the study process due to declining student numbers | Weakness | 2 |
| Partnership, research and study services | Developed partnership with agribusiness and social partners | Strength | 4 |
| | Expanded partnership with agribusiness and social partners | Strength | 4 |
| | The Academy of Agriculture has developed a system for providing laboratory, expert, consulting, and other services to agribusiness, the public sector, and scientific and academic institutions, which also includes the Faculty of Engineering – the range of services is being actively expanded and partnerships are being strengthened, although the potential of some areas has not yet been fully exploited | Strength | 3 |
| | A system has been developed and is in operation for the retraining of specialists in sectors related to the mission of the Academy of Agriculture and the Faculty of Engineering, and for the improvement of the competencies of managers and employees. Services are being implemented in a targeted manner, but there is still potential for growth in terms of expanding opportunities and regional accessibility | Strength | 3 |
| | Insufficient involvement in the development, improvement, and maintenance of agricultural and other national and international integrated information systems (ŽŪŽIS) | Weakness | 1 |
| Community, structure and management | The faculty community demonstrated a high level of cohesion during the reorganization, which shows institutional resilience and strong community solidarity, while maintaining internal stability in response to external challenges, continuing activities, and showing tolerance for motivational challenges | Strength | 4 |
| | The implementation of salary increases and motivation measures creates the conditions for a stronger culture of employee engagement and achievement | Strength | 3 |
| | In 2021, the restructuring of the Academy of Agriculture was completed by merging the Faculty of Agricultural Engineering and the Faculty of Water and Land Management into the Faculty of Engineering, which | Strength | 3 |

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| | significantly improved organizational clarity and ensured better alignment of studies and research with the institutional structure | | |
| | The establishment of the Bioeconomy Research Institute and the increase in the number of research positions have strengthened the potential of the academic community | Strength | 2 |
| | Signs of the decline of the academic community are becoming apparent. With teaching positions heavily dependent on student numbers, the number of teaching positions has fallen by 10% over the last three years | Weakness | 2 |
| | Insufficiently developed provision of science management services – although initial solutions are being initiated, functions have not yet been fully defined and resource allocation is limited | Weakness | 1 |
| Environment, general infrastructure, other factors | The unique academic campus and its strategically attractive geographical location provide an exceptional competitive advantage for the development of studies, science, and the community | Strength | 5 |
| | The infrastructure of the academy and faculty is open to the public, students, and businesses, promoting educational and collaborative activities, although opportunities for further development remain unexploited | Weakness | 2 |

*Evaluation on the 5-point scale:

- very important strength - 5 points, ..., unimportant strength - 2 points;
- very important weakness - 5 points, ..., unimportant weakness - 2 points.

SWOT ACTIVITIES OF THE FACULTY OF ENGINEERING

| Strengths | Weaknesses |
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| Developed partnership with agribusiness and social partners | Critically low number of students in I-cycle engineering science study programs |
| Unique study programs in engineering sciences | Low participation of students in international academic exchange programmes, absence of foreign students |
| Bringing the community together to meet external and internal challenges | The involvement of some teachers and researchers in research is still weak |
| High pedagogical and scientific competence of teachers and researchers, good study and research infrastructure | Insufficiently developed laboratory, expert, consulting services |
| **Opportunities** | **Threats** |
| The need for agriculture and water engineering specialists is more than 5 times higher than what they are being trained for | The national policy for the training of agriculture and water engineering specialists is inadequate for the expectations of the agricultural sector |
| The rapidly growing needs of new knowledge and future competences in agriculture and water management | Low attractiveness of study programs related to agriculture and water engineering |
| EU and national Green Deal policy priorities favour the development of scientific research in the field of technological sciences | Inferior conditions for students from peripheral regions to achieve the abilities to enter agricultural and water engineering university study programs |
| The accelerating rates of technological progress in agriculture and water management domain (digitalization, robotization, preservation of sustainability) are rapidly increasing the needs for scientific, consulting and qualification improvement | Decline in the academic community, with teaching positions heavily dependent on student numbers |

# STRATEGIC PLAN OF THE FACULTY OF ENGINEERING, VYTAUTAS MAGNUS UNIVERSITY AGRICULTURE ACADEMY FOR 2025-2027 AND TARGET INDICATORS FOR 2027

| Goal I - Studies | | | | | | | | | | | | | |
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| No. | Goals, objectives, measures of the Academy of Agriculture | Interfaces with VMU strategic plan measures (measure no.) | Dates of the achievement of the goals and objectives and the implementation of measures of the Academy of Agriculture | Indicators of the achievement of the goals and objectives of the Academy of Agriculture and the implementation of measures carried out by the departments | Numeric values of the AA indicators implemented by the department | Goals, objectives, measures, etc. of the strategic plan of the Faculty of Engineering | Internal departments implementing objectives, goals and measures | The internal department's implemen-ted indicators of AA and their numeric values up to year 2027 | Coordinating the implementa-tion of activities and performing monitoring on the scale of the Faculty of Engineering | Values of the Faculty of Engineering | | | |
| | | | | | | | | | | Fact 2024 (for compari-son) | Plan 2025 | Plan 2026 | Plan 2027 |
| 1. | To meet the needs of the agriculture, forest and water management domains, their infrastructure, and the related public institutions and communities for the LTGF level 6 and 7 specialists | Direction 3 | 2027 | The degree of satisfaction of the prognostic need of specialists, expressed in percent | At least 60 | To prepare agricultural and water management engineering specialists of the levels 6 and 7 LTGF | | At least 60 | Dean | | | | |
| 1.1. | To increase the number of students from Lithuania in I and II cycle study programs | x | 2027 | Number of students as on 1 October | 2250 | To search for students according to the annually approved marketing plan of the Academy of Agriculture, supplemented by faculty-specific measures | Study program committees, departments | 300 | Dean | 250 | 275 | 285 | 300 |
| 1.1.1. | Group of measures – joint coordinated actions with business and social partners regarding the improvement of admission conditions and financing of studies | x | 2027 | The number of students admitted to the first-cycle study programs | 300 | Group of measures – joint coordinated actions with business and social partners regarding the improvement of admission conditions and financing of studies | Study program committees, departments | 40 | Dean | 18 | 30 | 35 | 40 |

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| 1.1.1.2. | To prepare the concept of conditions for the admission of persons to agricultural study programmes and present it to the authorities of the Republic of Lithuania | 3.2.2.1<br>3.2.2.2 | 2025 (and necessary adjustments in subsequent years) | Concept | 1 | To delegate a faculty representative to the working group | Departments | | Dean | | | | |
| 1.1.1.3. | Initiate the inclusion of study programs dedicated to agriculture in the lists of priority study programs in the ministries of the Republic of Lithuania (Ministry of Environment, Ministry of Agriculture and others as necessary) | x | Every year | The number of study programs of the Academy of Agriculture included in the priority lists | 7 | To participate in the compilation of lists of priority study programmes | Departments | 4 | Dean | x | x | x | x |
| 1.1.2. | Group of measures – partnerships with non-university schools of higher education, vocational training institutions, and the authorities on joint preparation of the specialists. Consolidation of vocational training | x | 2027 | Number of the graduates from non-university schools of higher education admitted into the bridge studies | 85 | To publicize bridge and master's degree programs from non-university schools of higher education preparing professional bachelors of engineering and technological sciences | Study program committees, departments | 50 | Dean | 50 | 50 | 50 | 50 |
| | | | | Number of the persons holding vocational qualifications admitted into the first-cycle study programmes | 20 | To publicize study programs in vocational training institutions | Study program committees, departments | 5 | Dean, study programme committee chairpersons | 0 | 0 | 0 | 5 |
| 1.1.2.1. | To renew or conclude new cooperation agreements with colleges and vocational training institutions | x | 2027 | Number of cooperation agreements | 20 | To renew or conclude new cooperation agreements with colleges and vocational training institutions | Departments | 3 | Dean | 0 | 1 | 1 | 1 |

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| 1.1.2.2. | Together with the colleges, prepare common college study programs (agricultural engineering, agrotechnology, etc.), involving the teachers of the Academy of Agriculture in their implementation and using the infrastructure of the Academy of Agriculture | x | 2027 | Joint study programs with non-university schools of higher education | 2 | To prepare a common collegiate study program together with the non-university schools of higher education, involving the teachers of the Academy of Agriculture in their implementation and using the infrastructure of the Academy of Agriculture | Departments | | Dean | 0 | 0 | 0 | 1 |
| 1.1.2.4. | To prepare conditions for the use of the Academy of Agriculture's infrastructure (laboratories, study rooms, other infrastructure objects) for collegiate studies, professional practices, and educational excursions | x | Every year | Set conditions (document) | 1 | To delegate a faculty representative to the working group | Departments | | Dean | 1 | 1 | 1 | 1 |
| 1.1.3. | Group of measures - educational support for those who intend to enrol and have enrolled in the VMU Academy of Agriculture | x | Every year | Number of persons who have completed the program of preparation for the studies | 100 | To provide educational assistance to those intending to enrol and those enrolled in the Faculty of Engineering | | | Dean | x | x | x | x |
| 1.1.3.3. | To conduct additional educational courses for first-year students to strengthen socialization and integration into university activities | x | Every year | Number of educational courses | 12 | To conduct introductory week events | Departments | 3 | Dean | 3 | 3 | 3 | 3 |
| 1.1.3.4. | To continue the activities of the Smart Student Academy | x | Every year | Number of students | 2025 – 426<br>2026 - 447 | To continue the activities of the Smart Student Academy (SMA) Engineering Classes | Departments | 200 | Dean | 200 | 200 | 200 | 200 |

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| 1.1.3.6. | To develop an academic mentoring program based on the student-to-student principle | 3.1.5.3 | 2027 | Academy of Agriculture - the number of cases of student mentoring | 15 | To involve students of the Faculty of Engineering in the activities of the student mentoring program | | | Dean | 0 | 1 | 2 | 3 |
| 1.1.4. | Group of measures – popularization of study programs | x | 2027 | Percentage of those who chose to study at the Academy of Agriculture as their first priority | 50 | To popularize the study programs according to the approved marketing plan of the Academy of Agriculture, supplemented with specific measures of the faculty | Study program committees, departments | 40 | Dean | 0 | 30 | 35 | 40 |
| 1.1.4.3. | To organize events during which direct contact with pupils would be created, with the aim of gathering a network of pupils' ambassadors, involving them in already ongoing university activities | 3.4.3.3 | Constantly | Academy of Agriculture - number of ambassadors (pupils and students) | 20 | To participate in building a network of ambassadors (pupils and students). | | 4 | Dean | 2 | 4 | 4 | 4 |
| 1.1.5. | Group of measures - improvement of graduate career monitoring | x | 2027 | Share of employability of graduates according to acquired qualification (1 year after graduation), expressed in percent | 85 | Improvement of study programs, considering the needs of employers | | 85 | Study program committee chairpersons | x | x | x | x |
| 1.1.5.4. | To conduct annual analyses of the employability of graduates of the Academy of Agriculture (integrating the comparison with the indicators of the STRATA professional information tool, as well as with the | x | Every year | Employment analysis | 1 every year | To carry out an employability analysis of each study program | | | Study program committee chairpersons | | | | |

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| | international analysis of the average salary) | | | | | | | | | | | | |
| 1.1.5.6. | To expand personal counselling activities focused on the ability to plan one's career, to discover a professional identity and to acquire comprehensive knowledge and skills necessary to successfully establish oneself in the labour market, and to increase the inclusion of career competence development in the study process | 3.1.6.3 | Constantly | | | To participate in activities organized by CC | | | Dean | | | | |
| 1.2. | To increase the number of students from abroad | x | 2027 | Number of students from abroad as on 1 October | 250 | To prepare study programs for foreign students (individual and double degree) and students coming under exchange programs according to separate groups of study subjects | Study program committees, departments | 12 | Dean | 0 | 6 | 10 | 12 |
| 1.2.1. | Group of measures - strengthening partnerships with foreign universities in the field of studies | x | x | The number of students of the Academy of Agriculture participating in double degree study programs | 50 | Strengthening partnerships with foreign universities in the field of engineering studies | | | Dean | x | x | x | x |
| 1.2.1.1. | To establish partnerships with Western European universities for the preparation and implementation of double degree study programmes | 3.2.4.2, 3.5.1.4. | 2027 | Number of agreements for double degree study programs | 2 | To establish partnerships with Western European universities for the preparation and implementation of double degree | Study program committees, departments | 1 | Dean | 0 | 0 | 0 | 1 |

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| | | | | | | engineering study programs | | | | | | | |
| 1.2.1.2. | To establish partnerships with Eastern European and Asian universities for the preparation and implementation of double degree study programs | 3.2.4.2 | 2027 | Number of agreements for double degree study programs | 5 | To establish partnerships with Eastern European and Asian universities for the preparation and implementation of double degree engineering study programs | Study program committees, departments | | Dean | 1 | 1 | 1 | 1 |
| 1.2.1.3. | To prepare and implement double degree study programs | - | 2027 | Number of double degree programs running | 10 | To prepare and implement double degree engineering study programs | Study program committees, departments | 2 | Dean | 0 | 0 | 1 | 1 |
| 1.2.3. | Group of measures - improvement of international marketing | x | x | Share of foreigners in total student enrolment, expressed in percent | At least 10 | To participate in the development of international marketing | | At least 10 | Dean | | | | |
| 1.3. | To improve the quality of specialist training (studies) by responding to the needs of society, employers and students | x | 2027 | Percentage of study accredited for 7 years | At least 70 | To prepare and implement study quality improvement plans for ongoing engineering study programs | Study program committees | At least 70 | Dean, Study Program Committee Chairpersons | 90 | | | |
| 1.3.1.1. | Periodically conduct research on the professional field of study programs | x | Every year | Number of study programs whose study objectives have been revised based on professional field research | At least 10 | Conduct field research on the Faculty of Engineering study programs | Study program committees | At least 2 | Dean | 2 | 2 | 2 | 2 |
| 1.3.1.3. | Conduct an analysis and update of study programs, assessing the needs for interdisciplinarity and innovation, the results of professional field research, the challenges of the | 3.2.1.1. | Every year | Updated study programs | According to needs | **Implement the renewal of study programs at the Faculty of Engineering** | **Study program committees** | According to needs | Dean | 2 | 3 | | |

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| | green course, and future competencies | | | | | | | | | | | | |

## STRATEGIC PLAN OF THE FACULTY OF ENGINEERING, VYTAUTAS MAGNUS UNIVERSITY AGRICULTURE ACADEMY FOR 2025-2027 AND TARGET INDICATORS FOR 2027

| Goal II - Research (responsible in the faculty are heads of departments) | | | | | | | | | | | | | |
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| No. | Goals, objectives and measures of the Academy of Agriculture | Interfaces with VMU strategic plan measures (measure no.) | Dates of the achievement of the goals and objectives and the implementation of measures of the Academy of Agriculture | Indicators of the achievement of goals and objectives of the Academy of Agriculture, implementation of measures, carried out by the department | Numeric values of indicators of the Academy of Agriculture implemented by the department | Goals, objectives, measures, etc. of the strategic plan of the Faculty of Engineering | Internal departments implementing objectives, goals and measures | Indicators of the Academy of Agriculture implemented by the internal department and their numeric values in 2027 | Coordinating the implementation of activities and performing monitoring on the scale of the Faculty of Engineering | Values of the Faculty of Engineering | | | |
| | | | | | | | | | | Fact of the year 2024 (for compa-rison) | Plan for 2025 | Plan for 2026 | Plan for 2027 |
| 2. | To develop the fundamental and applied research and R&D in the priority research areas that are in line with the EU's Green Deal policy | Direction 2 | 2027 | Annual scientific output according to the methodology of the Research Council of Lithuania, per FTE unit, expressed in points: - in the fields of agriculture, technology and natural sciences - in the field of social sciences | 12.0<br>25.0 | To develop fundamental, applied research and R&D in technological sciences that are in line with the Green Deal policy in priority research areas | Departments | 12 | Dean | 15..51 (2023) | 12.0 | 12.0 | 12.0 |
| 2.1. | To strengthen competitiveness on the international and national research market | x | 2027 | 1. Annual number of articles per FTE unit published in the international publications with an impact factor: | 2,1<br>2,9 | Annual number of articles per FTE unit published in the international publications with an impact factor in the field of | Departments | 1,6 | Heads of the departments | 1,53 | 1,1 | 1,3 | 1,6 |

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| | | | | - in the agricultural, technology, and natural sciences<br>- in the social sciences | | technological sciences | | | | | | | |
| | | | | 2. Annual value of international and national R&D projects, EUR thous. | 2500 | Annual value of international and national R&D projects, EUR thous. | Departments | 600 | Heads of the departments | 763 | 600 | 600 | 600 |
| | | | | 3. The number of conducted international R&D projects coordinated by the VMU Agriculture | 3 | To coordinate an international R&D project | Departments | 1 | Heads of the departments | | | | |
| 2.1.1. | Group of measures – partnership development with business and social partners in the field of science and innovation | x | 2027 | A favourable environment for the development of R&D | | To develop partnerships with business and social partners in the field of science and innovation | Departments | | Heads of the departments | | | | |
| 2.1.1.1. | Together with business and social partners, identify the needs of relevant applied research and experimental development works, presenting them to the Lithuanian Council of Science, the Ministry of Agriculture, MoD, and other institutions | - | Every year | List of current applied research and experimental development works | One every year | To propose a list of applied research and experimental development works | Departments | | Heads of the departments | | | | |
| 2.1.2. | Group of measures – adjustment and refinement of priority areas of scientific activity | x | 2027 | Effective thematic system of scientific activity | - | To specify, as needed, the directions of the Faculty of Engineering's scientific activities | Departments | | Dean, heads of the departments | | | | |

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| 2.1.2.1. | To newly approve priority directions of scientific activity according to established criteria | - | According to needs | Description of priority areas of scientific activity | 1 | To approve the priority directions of scientific activity | Departments | according to the need | Dean, heads of the departments | | | | |
| 2.1.2.2. | Newly approve the long-term research topics of the faculties (clusters, centres, as needed) according to the approved priority directions of scientific activity | - | As needed and later | Lists of long-term topics of scientific research of faculties (clusters, centres as needed) | 4 | To compile lists of long-term research topics of departments | Departments | according to the need | Dean, heads of the departments | | | | |
| 2.1.2.3 | To substantiate and approve new research topics (previously not carried out by the Agriculture Academy) and their assignment to academic departments for studies and long-term development of scientific activities | - | As needed and later | List of new research topics | 1 | To participate in the creation of new research topics | Departments | according to the need | Dean, heads of the departments | | | | |
| 2.1.3 | Group of measures – structural measures for interdisciplinary coordination of scientific research | x | 2027 | Number of successful applications for R&D projects per year | 17 on average | To submit applications for R&D projects | Departments | 4 | Heads of the departments | 4 | 4 | 4 | 4 |
| 2.1.3.8. | Submit applications and carry out international and national scientific projects aimed at substantiating bioeconomy (ecosystems and biodiversity), the European Green Deal policy, rural policy and its measures | 5.3.1.2 | Every year | Academy of Agriculture - number of submitted applications per year | Academy of Agriculture – on average 50 | To participate in research groups applying and implementing international and national projects to support the bioeconomy, the European Green Deal Policy, rural policy and its measures. | Departments | 10 | Heads of the departments | 10 | 10 | 10 | 10 |
| 2.1.4. | Group of measures - means of involvement in international scientific platforms and infrastructure consortia, effective representation in them | x | 2027 | Number of representatives of the Academy of Agriculture on international platforms, consortia and networks | 12 | To participate as representatives of the Faculty of Engineering in international platforms, infrastructure consortia | Departments | 3 | Dean, heads of the departments | | 1 | 1 | 1 |

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| 2.1.4.1. | To develop partnerships by participating in partner search platforms (EKHorizon Europe, Crowdhelix, etc. measures) in order to become a partner in project application consortia initiated by other institutions | 2.1.2.4 | 2025–2027 | Academy of Agriculture - number of applications for R&D projects with partners from foreign institutions | At least 1 every year | To participate in joint teams of the Academy of Agriculture in submitting applications for R&D projects with partners from foreign institutions | Departments | | Heads of the departments | | | | |
| 2.1.4.2. | To join national and international clusters (1 per year) | 2.5.1.2 | 2025–2027 | Academy of Agriculture - number of cluster memberships | At least 3 (2027) | To participate in the joint teams of the Academy of Agriculture by participating in national and international clusters | Departments | | Heads of the departments | | | | |
| 2.1.4.3. | To encourage teachers and researchers to actively participate in mobility programmes in order to establish new international contacts | 2.1.3.1 | 2025–2027 | Academy of Agriculture - number of teachers and research workers in research mobility programs | At least 20 every year | For teachers and research workers to participate in mobility programs | Departments | At least 5 every year | Heads of the departments | | | | 5 |
| 2.1.4.4. | To expand the involvement of academic staff in international professional thematic networks, editorial boards of scientific journals, the circle of experts of national and international scientific programs | 2.5.1.1 | 2025–2027 | Academy of Agriculture - number of representatives in professional thematic networks | 7 (2027) | Number of representatives of the Faculty of Engineering participating in professional thematic networks | Departments | 2 | Heads of the departments | | | | 2 |
| | | | | Number of members in editorials of scientific journals | 28 (2027) | To participate in editorials of scientific journals | Departments | 10 | Heads of the departments | 10 | 10 | 10 | 10 |
| | | | | Number of experts in international | 13 (2027) | To participate as experts in international | Departments | 2 | Heads of the departments | | | | 2 |

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| | | | | science programmes | | scientific programmes | | | | | | | |
| 2.1.5. | Group of measures - creation of favourable conditions for carrying out priority R&D | x | 2027 | The average annual growth rate of the number of articles published in the international publications with an impact factor, expressed in percent | 5,0 | Creation of favourable conditions for priority R&D | | 5.0 | Dean, heads of the departments | | | | |
| 2.1.5.1. | To financially encourage teachers and researchers from the University Science Fund to publish in international scientific journals with an impact factor. To motivate the choice of open access journals and publishers | 2.1.2.6 | 2025–2027 | Academy of Agriculture - number of publications for which their authors were encouraged | At least 40 publications every year | To participate in the University Science Fund promotion fund competition | Departments | At least 10 publications every year | Heads of the departments | | | | |
| 2.1.5.2. | To financially encourage teachers and research workers from the Chancellor's Fund of the Academy of Agriculture to achieve outstanding scientific results | x | 2021–2027 | Number of publications for which their authors have been encouraged | At least 20 publications annually | To participate in the promotion competition for teachers and research workers from the Chancellor's Fund of the Academy of Agriculture | Departments | 5 | Dean, heads of the departments | | 5 | 5 | 5 |
| 2.1.5.4. | To conduct international competitions for scientific and pedagogical positions (to seek that 50% of academic departments employ at least one top-level foreign scientist-leader, artist) | 2.1.3.2 | 2025–2027 | Academy of Agriculture - number of teachers and research workers from abroad | At least 1 in all academic departments (2027) | To participate in the search for scientists and educators who would participate in the competition for teachers and researchers of the Academy of Agriculture | Departments | At least 1 | Dean, heads of the departments | | | | |

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| 2.1.5.6. | To financially encourage doctoral students from the University Science Foundation to publish in international scientific journals with an impact factor (1-2 Q CA WOS citation index for exact sciences) | 2.2.3.4 | 2025-2027 | Academy of Agriculture - number of promoted doctoral students | At least 5 annually | Doctoral students of the Faculty are encouraged to participate from the funds of the University Science Fund | Departments | At least 1 every year | Heads of the departments | | | | |
| 2.1.6. | Group of measures – improvement of the system of scientific management and technical support for scientific projects | x | 2027 | Average estimate of researchers' satisfaction with managerial and technical support | At least 8.5 points (out of 10 points) | To delegate a faculty representative to the working group for the improvement of the system of scientific management and technical support for scientific projects | | | Dean | | | | |
| 2.2. | To develop innovative activities | x | 2027 | Annual value of projects aimed at introducing scientific innovations (EIP, projects “Intelektas”, “Ino čekiai”, etc.), in thousands of euros | 350 | To participate in projects aimed at introducing scientific innovations | Departments | 50 | Heads of the departments | | 50 | 50 | 50 |
| 2.2.1. | Group of measures - promotion of involvement in projects aimed at implementing scientific innovations (EIP, projects “Intelektas”, “Ino čekiai”, etc.) | x | 2027 | Percentage of the total number of teachers and researchers, doctoral students participating in projects aimed at implementing scientific innovation. | 30 | To involve Faculty of Engineering lecturers, researchers, doctoral students in projects aimed at introducing scientific innovations | Departments | 30 | Heads of the departments | | 10 | 20 | 30 |

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| 2.2.1.1. | To encourage teachers and researchers to actively patent new products and technologies created. Assist in the preparation of patent applications | 2.1.4.1 | 2025–2027 | Academy of Agriculture - number of submitted patent applications | 1 every year | Patent new products and technologies created | Departments | 1 every two years | Heads of the departments | | | | |
| 2.3. | To develop the dissemination of innovative scientific knowledge and to increase the social impact of science | | 2027 | Number of science popularization articles per FTE unit per year | 3.0 | Write science popularization articles | Departments | 3.0 per FTE annually | Heads of the departments | | | | |

# STRATEGIC PLAN OF THE FACULTY OF ENGINEERING, VYTAUTAS MAGNUS UNIVERSITY AGRICULTURE ACADEMY FOR 2025-2027 AND TARGET INDICATORS FOR 2027

| Goal III - Scientific services (responsible in the faculty is the dean) | | | | | | | | | | | | | |
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| No. | Goals, objectives, measures of the Academy of Agriculture | Interfaces with VMU strategic plan measures (measure no.) | Dates of the achievement of the goals and objectives and the implementation of measures of the Academy of Agriculture | Indicators of the achievement of goals and objectives of the Academy of Agriculture, implementation of measures, carried out by the department | Numeric values of indicators of the Academy of Agriculture implemented by the department | Goals, objectives, measures, etc. of the strategic plan of the Faculty of Engineering | Internal departments implementing objectives, goals and measures | Indicators of the Academy of Agriculture implemented by the internal department and their numeric values until 2027 | Coordinating the implementa-tion of activities and performing monitoring on the scale of the Faculty of Engineering | Values of the Faculty of Engineering | | | |
| | | | | | | | | | | Fact 2024 (for compa-rison) | Plan 2025 | Plan 2026 | Plan 2027 |
| 3. | To develop specialist and manager qualification improvement, consultancy, expert, laboratory and other scientific services in line with the needs of the agriculture, forest and water management domains, their infrastructure, and the related public institutions and communities | Direction 5 | 2027 | Annual value of services in thousand euros | 530 | To participate in the provision of consulting, expert, laboratory and other scientific services | Departments | 100 | Dean, heads of departments | | | | |
| 3.1. | To create and enable a system for the provision of consulting services | | 2027 | The annual value of consulting services in thousand euros | 100 | To provide consulting services | Departments | 20 | Dean, heads of departments | | | | |
| 3.3. | To develop expert, laboratory and other scientific services | x | 2027 | The annual value of scientific services in thousands of euros | 180 | To provide expert, laboratory and other scientific services | Departments | 40 | Dean, heads of departments | | | | |
| 3.3.1. | Group of measures – development of expert services | x | 2027 | Total number of provided expert services | 15 | To develop expert services | Departments | 4 | Dean, heads of departments | | | | |

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| 3.3.1.1. | To form high-competence expert groups on bio-economy, the EU's Green Deal policy, rural development policy, providing expert opinions through various media means | 5.3.2.1 | 2025–2027 | Number of expert opinions provided by various media outlets | In 2025 – 35<br>In 2026 – 40<br>In 2027 – 50 | To participate in the creation of high-competence bio-economy, the EU's Green Deal policy, rural development policy expert groups, providing expert opinions through various media means. | Departments | 12 | Dean, heads of departments | | 8 | 10 | 12 |
| 3.3.1.2. | To provide expert evaluations of new EU and national legislation in the fields of bio-economy, green course, rural policy | 2.3.3.1 | 2025–2027 | Number of expertly evaluated legal acts | In 2025 – 10<br>In 2026 – 10<br>In 2027 – 10 | To participate in providing expert evaluations of new EU and national legislation in the fields of bio-economy, green course, rural policy. | | 1 | Dean, heads of departments | | | | 1 |
| 3.3.1.3. | To get involved in the preparation of EU, national and regional strategies and legislation in the fields of bio-economy, EU green course, rural policy | - | 2025–2027 | Number of cases of involvement in strategy and legislative drafting groups | In 2025 – 5<br>In 2026 – 5<br>In 2027 – 5 | To get involved in the preparation of EU, national and regional strategies and legislation in the fields of bio-economy, EU green course, rural policy. | | 1 | Dean, heads of departments | | | | 1 |
| 3.3.1.4. | To actively participate in the activities of the Lithuanian Chamber of Agriculture, the Lithuanian Council of Agriculture, regional development councils and other collegial institutions | - | 2025–2027 | Number of activities in councils and other institutions | At least 5 per year | To actively participate in the activities of the Lithuanian Chamber of Agriculture, the Lithuanian Council of Agriculture, regional development councils and other collegial institutions. | | 1 | Dean, heads of departments | | | | 1 |

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| 3.3.1.5. | To increase the visibility and recognizability of the University's highly competent experts in society, national and international media | 5.2.2.1 | 2025–2027 | | | To increase the visibility and recognizability of the Faculty's highly competent experts in society, national and international media | | | Dean, heads of departments | | | | |
| 3.3.2. | Group of measures – development of laboratory and other scientific services | x | 2027 | Annual mean rate of growth in laboratory and other scientific services, expressed in percent | 5 percent | To develop expert and other scientific services | | 5 percent | Heads of departments | | 5 | 5 | 5 |
| 3.3.2.1. | To prepare a concept for the development of laboratory and other scientific services | 3.2.7.2 | Annually, as needed | The concept is ready | 1 | To delegate faculty representatives who would prepare the concept of development of laboratory and other scientific services | | Annually, as needed | Dean, heads of departments | | | | |

# STRATEGIC PLAN OF THE FACULTY OF ENGINEERING, VYTAUTAS MAGNUS UNIVERSITY AGRICULTURE ACADEMY FOR 2025-2027 AND TARGET INDICATORS FOR 2027

| Horizontal strategic direction (responsible in the faculty is the dean) | | | | | | | | | | | | | |
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| No. | Goals, objectives, measures of the Academy of Agriculture | Interfaces with VMU strategic plan measures (measure no.) | Dates of the achievement of the goals and objectives and the implementation of measures of the Academy of Agriculture | Indicators of the achievement of goals and objectives of the Academy of Agriculture, implementation of measures, carried out by the department | Numeric values of indicators of the Academy of Agriculture implemented by the department | Goals, objectives, measures, etc. of the strategic plan of the Faculty of Engineering | Internal departments implementing objectives, goals and measures | Indicators of the Academy of Agriculture implemented by the internal department and their numeric values until 2027 | Coordinating the implementation of activities and performing monitoring on the scale of the Faculty of Engineering | Values of the Faculty of Engineering | | | |
| | | | | | | | | | | Fact 2024 (for comparison) | Plan 2025 | Plan 2026 | Plan 2027 |
| **H.** | To create a motivating and sustainably favourable environment for the expression of community members' partnership, professionalism, creativity, community and health | Directions 1.4 and 5 | 2027 | Integrated indicator of employee well-being | ≥ 85 percent | To create a motivating and sustainably favourable environment for the expression of partnership, professionalism, creativity, community spirit and wellness among members of the faculty community | | ≥ 85 percent | Dean | 75 percent | ≥ 85 percent | ≥ 85 percent | ≥ 85 percent |

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| H.1. | Group of measures - further strengthening of partnership with business and social partners as well as community spirit | x | 2027 | Average score of satisfaction of business and social partners | At least 8.5 (on a 10-point scale) | To strengthen partnership with business and social partners | | At least 8.5 (on a 10-point scale) | Dean | 8.7 | ≥ 8.5 | ≥ 8.5 | ≥ 8.5 |
| H.3. | Group of measures - improvement of employees' competences | x | 2027 | Percentage of employees who participated in competency development events | At least 90 percent | To encourage faculty employees to participate in competency development events. | | At least 90 percent | Dean | 82.6 | 90 | 90 | 90 |
| H.3.1. | To create a consistent, high-quality, efficient qualification improvement system that meets the needs of teachers | 3.3.1.1 | Annually | Agriculture Academy - implementation of the qualification improvement system | 1 | To participate in the creation of a consistent, high-quality, efficient qualification improvement system that meets the needs of teachers. | | | Dean | | | | |

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| H.3.2. | To create conditions for employees to improve not only according to their positions, but also in order to acquire new abilities and competences | 4.3.1.2 | Annually | | | To create conditions for employees to improve not only according to their positions, but also in order to acquire new abilities and competences | | | Dean, heads of departments | | | | |
| H.3.3. | To prepare a system for recognizing the qualification requirements and competences of a digitally competent teacher | 3.3.2.3 | 2027 | Academy of Agriculture - implementation of the system of recognition of qualification requirements and digital competences among teachers | At least 25 percent teachers per year | To participate in the preparation of a system for recognizing the qualification requirements and competences of a digitally competent teacher. | | | Dean, heads of departments | | | | |
| H.3.4. | To develop a system for recognizing and promoting the mobility of teachers and non-academic staff | 3.2.4.1 | Annually | Agriculture Academy - application of the mobility recognition and promotion system | The number of those who leave to teach - on average 15 percent per year | To develop a system for recognizing and promoting the mobility of teachers and non-academic staff | | | Dean, heads of departments | | | | |

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| H.3.6. | To create and implement a system of practical internships for teachers | x | 2027 | Percentage of teachers who went on practical internships | 15 percent per year | To participate in the development and implementation of the system of practical internships for teachers | | | Dean, heads of departments | | | | |
| H.4.3. | To create an incentive system for teachers to encourage the involvement of students in research | 3.1.4.3 | 2027 | | | To participate in the development of a faculty incentive system to encourage student involvement in research | | | Dean, heads of departments | | | | |
| H.5. | Group of measures - creating favourable conditions for a healthy lifestyle and physical activity of community members | 1.2.4 | 2027 | Percentage of community members involved in physical activity activities organized by the Academy of Agriculture | 20 | To encourage members of the faculty community to get involved in physical activity activities organized by the Academy of Agriculture | | 20 | Dean, heads of departments | 14 AA | | | |
| H.6. | Group of measures – improving the infrastructure and working conditions of the Academy of Agriculture | x | 2027 | Average score estimate of employee satisfaction with working conditions | 9.0 (out of 10 points) | To take care of the infrastructure of the faculty and the improvement of working conditions | | 9.0 (out of 10 points) | Dean, heads of departments | 7.5 AA | | | |

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| H.6.1. | To carry out an assessment of the use of various types of laboratories and draw up a calendar plan for their (and equipment) renewal | x | Annually | Prepared plan | 1 | To carry out an assessment of the auditoriums and create a calendar plan for renewing them and the equipment | | According to needs | Dean, heads of departments | | | | |
| H.6.2. | Renovation of science laboratories and acquisition of equipment necessary for innovative studies according to the needs of study programs | 3.1.1. 2 | Continuously | Agriculture Academy - number of renovated laboratories | Agriculture Academy - according to the renewal plan | According to the needs of the study programs, to purchase equipment necessary for innovative studies | | Continuously | Dean, heads of departments | | | | |