VILNIAUS KOLEGIJA / UNIVERSITY OF APPLIED SCIENCES



### Field of Study: ENVIRONMENTAL ENGINEERING (E03)

### SELF EVALUATION REPORT

May, 2021

### Study Field Data\*

N	Title of the o study programme	State code	Type of studies	Cycle of studies	Mode of study and duration (in years)	Credit volume	Qualification degree and (or) professional qualification	Language of instruction	Minimum education required	Registration date of the study programme	Study programme termination date (if applicable)	Study programme location
	. Landscape Design	6531EX029	College studies	First cycle	Full-time, Full-time organised in sessions, 3 years	180	Professional Bachelor of Engineering Sciences	Lithuanian	If the secondary education was obtained in 2020 and 2019, candidates to a state-funded study place have to pass three state level Matura examinations: Lithuanian language and literature state Matura exam, foreign language (English, German or French) state Matura or international exam, and mathematics (except art studies) state Matura exam; the arithmetic average of the annual assessments of the five compulsory subjects, rounded to the nearest whole number, is not less than 6; competition score is not less than 4.3; candidates to a place not funded by state have to pass one state level Matura examination; competition score is not less than 4.3.	31 August 2001, No 1254 Re-registered 26 June 2002, No 1190	-	39A Studentų Street, LT-08106 Vilnius

\* if there are **joint** / **two-fields** / **interdisciplinary** study programmes in the study field, please designate it in the foot-note

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### **INTRODUCTION**

Vilniaus Kolegija / University of Applied Sciences (hereinafter referred to as VK) is an accredited state higher education institution of the Republic of Lithuania, which provides higher education college studies, elaborates applied research, experimental development, and professional art. VK was established in 2000 by merging separate specialized higher education schools. Currently, VK is the largest professional higher education institution in Lithuania.

The mission of the VK is to train practice-oriented specialists with professional higher education in study field groups of engineering, informatics, social, health, technology, physical, agricultural, veterinary, educational sciences, humanities and arts, business and public management, and to meet the economic and social needs of the Vilnius region and Lithuania as a whole. To ensure a modern study process, corresponding to the European standards, while cooperating effectively with the representatives of the business world. To develop students' general skills and provisions of civic values necessary for the VK graduates' work and continuous studies.

The studies are organized in seven faculties: Faculty of Electronics and Informatics, Faculty of Economics, Faculty of Business Management, Faculty of Health Care, Faculty of Pedagogy, Faculty of Agrotechnologies, and Faculty of Arts and Creative Technologies.

44 study programmes, which assign to 12 groups of study fields, 28 study fields, were carried out on the 1 October 2020 in VK, 6391 students studied, including 126 foreigners, studying the entire study programme.

VK ranks first in national rankings and has received various awards.

Since the establishment of VK, two institutional evaluations have taken place: in 2005 - by a group of national experts; in 2014 – by international experts. In both cases, VK was accredited for a maximum period.

VK has autonomy, which includes academic, administrative, economic, and financial management activities, based on the principle of self-government and academic freedom. The autonomy of VK combines accountability to the public, the Government and the Ministry of Education, Science, and Sport.

The Collegial governing bodies are VK Board and the Academic Council. VK Board is the highest Managing Body of the institution. The Academic Council manages the academic affairs of VK.

The Rector is elected by VK Board for a 5-year tenure. The Rector has Vice-Rectors who supervise different areas: Vice-Rector for Studies, Vice-Rector for Science and Partnership, Vice-Rector for Economics.

VK applies two structural models of governance: central - administrative and the faculty role model; they both are vertical – aligned from top-down to bottom-up whereas separate units are linked with subordinate relations. The management models are based on a formal hierarchy principle, which ensures the implementation of VK strategic goals and effective feedback. The management structure is favourable for studies: students use laboratories of other faculties, training centres, the central library branches; teachers may work in different faculties.

In parallel, there is a horizontal model of self-governance: Academic Council, Faculty Councils, and Faculty Student Councils. This ensures the representation of the VK community and its participation in decision-making as well as publicity through accountability.

The Faculty of Agrotechnologies (hereinafter the Faculty) is a division within VK, responsible for the organization of studies, applied research and (or) art activities carried out in related groups of study fields, quality assurance of academic activities, planning activity within the Faculty.

The Faculty is managed and represented by the Dean. The Vice-Dean administers the academic activity of the Faculty. There are 4 Departments in the Faculty. Teachers (Associated Professors, Lecturers, and Assistants) work in the Departments. The study process of the Faculty is administered by the Study Department. The Department is supervised by the Head of the Department. Heads of Departments are responsible to the Vice-Dean. The organizational management structure of the Faculty is presented in Annex 12. The institution of academic self-government of the Faculty is the Faculty Council.

The Faculty of Agrotechnologies offers 5 study fields: agriculture (I01), chemistry (C01), veterinary medicine (H01), environmental engineering (E03) and food technology (F06). The Faculty has an ornamental plant growing centre "VikoFlora", a laboratory for applied research and a veterinary clinic. The variety of study fields creates conditions for conducting representative interdisciplinary research, the results of which are made public at Lithuanian and foreign conferences and published in scientific publications in international databases.

VK offers one study programme in the group of engineering fields of study, in the field of environmental engineering, which is Landscape Design (6531EX029) (hereinafter referred to as the Programme). The Programme has been in operation since 1 September 2001, re-registered on 26 June 2002. The Programme was accredited two times: by Order No 1-73 of the Director of the Centre for Quality Assessment in Higher Education "On the Procedure for the Evaluation and Accreditation of Study Programmes" of 17 August 2009 and Order No SV5-81 of the Director of the Centre for Quality Assessment in Higher Education Reference of 2 April 2013. Regarding the external evaluation of the Programme, by Order No SV6-15 of the Director of the Centre for Quality Assessment in Higher Education of the Programme has been extended until it is evaluated together with other study programmes in the same field (or group of fields) (https://e-seimas.lt/portal/legalAct/lt/TAD/21556c81889211e98a8298567570d639).

In 2012, the Programme (former name – Landscape Gardening and Design) was accredited for a period of 6 years, and gained 19 points. The area of external evaluation of the Programme - the aims of the Programme and the learning outcomes were evaluated very positively (the field is exceptional), the structure of the Programme was evaluated as good (the field has a systematic development and has its own characteristics). The structure of the Programme not only meets the needs of the labour market, but also reflects changes in this professional field.

To provide a more accurate reflection of the professional field of the trained specialist and having regard to the results of surveys of employers, teachers and students, in 2014, the Study Program Committee (hereinafter SPC) initiated the change of the name of the Programme from "Landscape Gardening and Design" to "Landscape Design".

Until 2016, according to the list of branches forming study fields, approved by Order No V-222 of the Minister of Education and Science of the Republic of Lithuania of 19 February 2010 (<u>https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/TAIS.365785</u>), the Programme belonged to the field of Engineering Studies (H900), branch of Landscape Design (H930).

Following the adoption of the new list of study fields and groups of fields by Order No V-1075 of the Minister of Education and Science of the Republic of Lithuania of 1 December 2016, according to which studies in higher education institutions are undertaken, and Qualifications Framework (<u>https://www.etar.lt/portal/lt/legalAct/ae5d5730b7c211e693eea1ef35f20da9/asr</u>), VK submitted a letter to the Centre for Quality Assessment in Higher Education regarding possible inclusion of sub-fields – Design of Green Zones and Landscape Planning when the Description of Engineering Fields of Study was in preparation. Currently, the Programme is assigned to the group of Engineering study fields (E), Environmental Engineering study field (E03).

This Self-Evaluation Report presents data on the Landscape Design study programme carried out in the field of environmental engineering, and covers the last three study years. The Self-Evaluation Report was performed by the Self-Evaluation Group, which was established by Order of the Rector of VK.

### ANALYSIS OF FIELD AND CYCLE OF STUDIES

### 1. Study aims, outcomes and content

# **1.1.** Evaluation of the conformity of the aims and outcomes of the field and cycle study programmes to the needs of the society and/or the labour market

Over the last decades, the key areas of professional activities of Professional Bachelors of Engineering Sciences, graduates of the Landscape Design study programme, have been established. Graduates successfully work in landscaping of private residential plots and other small landscape architectural objects (individual activity), and landscaping of land plots of public buildings and other larger landscape architectural objects (in landscape companies).

Landscaping, as the formation of a cultural landscape and management of the environment, includes formation of the terrain, construction of driveways, bicycle and pedestrian paths, installation of parking facilities and children's playgrounds, construction of small landscape architectural structures, setting up of green spaces, therefore, practical activity reinforced the need for engineering competences related to the landscaping of the site during the installation of engineering networks.

The field of professional activity of the trained specialist corresponds precisely to the relatively new field of activity formed at the junction of landscape architecture and design - landscape design. Landscape Design is an artistic-technical construction of the elements that make up the material component of the landscape architectural object (small buildings of landscape architecture: retaining walls, fences, stairs, outdoor furniture and lighting, lightweight gazebos, roofs, footbridges, bridges, information structures (stands, shields, signs, etc.), sculptures, works of environmental art, other single-style landscaping and decoration structures) (Law on Greenery of the Republic of Lithuania, Article 2, Paragraph 9 https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/TAIS.301807), equipment, etc., having regard to the ongoing human activity. It is both art and science to form the full-fledged material environment of the landscape from these elements in contextual space. In Lithuania, part of graduates of design studies are awarded a Professional Bachelor of Engineering Sciences (Vilnius Academy of Arts, Vilnius College of Design, etc.), while others - Professional Bachelor of Arts (Vilnius TECH, Kaunas College of Forestry and Environmental Engineering, etc.).

The main objective of the European Landscape Convention (<u>https://e-seimas.lrs.lt/portal/legalAct/ltTAD/TAIS.189933</u>), signed by the Republic of Lithuania in 2000 (ratified in 2002), is to promote landscape protection, management and planning, and to organise cooperation on landscape matters. In Article 6 of the Convention, each party has committed itself to promoting the development of multidisciplinary vocational training programmes in landscape policy, protection, management and planning

The need for sustainable, rational planning and management of the environment in accordance with environmental requirements is evidenced by the need for specialists in this field in economically developed countries. Lithuania is witnessing the growth of social needs for the development of a sustainable environment, which has intensified after the accession to the European Union.

According to the Official Statistics Portal (<u>https://osp.stat.gov.lt/statistiniu-rodikliu-analize#/</u>), the number and area of clean and tidy green spaces has increased over the last five years (Figure 1.1.). This also determines the need for specialists in landscape design who are able to install and maintain green spaces.



Figure 1.1. Number of landscaped green spaces (https://osp.stat.gov.lt/statistiniu-rodikliu-analize#/)

The importance of a clean and safe environment for achieving the strategic objectives of the state is emphasized in the Progress Strategy of the State "Lithuania's Progress Strategy "Lithuania 2030" (https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/TAIS.425517). As environmental management specialists contribute to positive environmental changes, therefore, it follows from the strategy that these specialists will also be in demand in the future.

In Vilnius, the growing trend of real estate development from multi-apartment residential buildings to the majority of single-family or block residential houses with a private plot of land creates preconditions for a substantial increase in the scope of activities for landscape professionals in the Vilnius region.

The aim of the Programme is to prepare Professional Bachelors of Engineering Sciences who are able to design and implement landscaping of land plots of residential buildings and other small-scale landscape architectural objects; to implement projects of small landscape architectural buildings and create element design of those buildings and landscaping improvement; to participate in the design of engineering systems of plantation territories; to manage green spaces; to organise cultivation of ornamental plants. The outcomes of the Programme are formulated so as to ensure proper preparation of the graduate for future occupational activity. The outcomes of the Programme denote knowledge, comprehension and abilities of the graduate. The outcomes of the Programme are achieved by developing critical thinking, ability to communicate in a professional environment in Lithuanian and foreign languages, analyse results of any studies performed, solve problems by integrating engineering knowledge (Annex 3).

The aim of the Programme, competences, and learning outcomes are related to one of the strategic goals of the VK Strategy for 2021–2025, that is to meet the needs of the Lithuanian and international labour market, which are in line with higher professional education and lifelong learning.

The key provisions in the formulation of the outcomes of the Programme were: studies that meet the needs of the student (student-oriented); receptive educational environment; close cooperation with the representatives of the business world that guarantees constant change of the study process and professional information based on the latest evidence; participation in transnational mobility. The upgrading of learning outcomes was influenced by the VK membership in ECLAS (The European Council of Landscape Architecture Schools).

In order to bring the competences of the trained specialists closer to the changing needs of the labour market, the Study Programme Committee (hereinafter referred to as SPC) conducted a survey of needs of the Programme graduates, during which companies in the field of landscaping in Vilnius region were surveyed.

The survey revealed that almost half of the surveyed landscaping companies employ graduates of the VK Landscape Design study programme (work managers, project managers, landscaping engineers, landscaping maintenance specialists, landscape designers). The results of the survey

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reflected the opinion of employers that the specialists trained by the Programme will be in demand in the next three years (claimed 53 per cent of the respondents). Every year, students of the Programme receive proposals from landscaping companies for practice and employment.

VK is the only higher education institution in Lithuania where the Landscape Design study programme is carried out. Study programmes with similar names are run by Kaunas Forestry and Environmental Engineering University of Applied Sciences – Landscape Design, and Vytautas Magnus University – Landscape Gardening and Design. Students graduating from these study programmes at VK and Kaunas Forestry and Environmental Engineering University of Applied Sciences are awarded the Professional Bachelor of Engineering Sciences.

The content of the Programme consists of subjects that ensure the development of competences in the fields of biomedicine, physical, technological, social and art sciences. These competences are essential for the training of comprehensive high-level professionals (Annex 4).

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

The goals provided in the VK Strategy for 2021–2025 oblige to carry out professional higher education studies and lifelong learning that meet the needs of the Lithuanian and international labour market, to develop applied research, experimental development and efficient professional art relevant to the business world, to strengthen the effectiveness of the impact on the country and region, to cultivate an organizational culture focused on the mobilization of community members and socially responsible community spirit.

Taking into account the strategic goals of the institution and coordinating them with the implementation of the aims and learning outcome of the Programme, great emphasis is placed on the strengthening and expansion of internationalisation, promotion and development of applied research activities among teachers, preparation and implementation of national and international projects, as well as professional higher education studies that meet the needs of the labour market, continuous development of the student-oriented study process, improvement of the internal quality assurance system of the studies, creation of a modern study environment, involvement of students in the applied scientific and professional artistic activities, purchases of resources necessary to perform these activities, etc.

### **1.3.** Evaluation of the compliance of the field and cycle study programme with legal requirements

The Programme is compliant with the following legal requirements:

Description of General Studies Requirements (Order No V-1168 of the Ministry of Education and Science of 30 December 2016) (<u>https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/</u> <u>a4caf862ced511e6a476d5908abd2210/asr</u>);

Description of the Group of Engineering Fields of Studies, approved by Order V-964 of the Minister of Education and Science of the Republic of Lithuania of 10 September 2015 (there is no description of environmental engineering) (<u>https://seimas.lrs.lt/portal/legalAct/lt/TAD/</u> <u>48aa06b058b711e5a9129f08109b20ec/asr</u>);

Description of Full-Time and Part-Time Study Modes (Order No ISAK-1026 of the Ministry of Education and Science of 12 May 2009) (https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/TAIS.344309), according to which contact hours in both forms of studies have been harmonized;

List of Study Fields and Groups of Fields according to which studies in higher education institutions are conducted, and the amendment procedure of it, approval of the Qualification Framework and the principles of compiling the names of study programmes (Order No V-1075 of the Ministry of Education and Science of 30 December 2016) (https://www.e-tar.lt/portal/lt/legalAct/ae5d5730b7c211e693eea1ef35f20da9);

The Procedure of Studies at VK (approved by the Academic Council Resolution No ATN-5 of 4 May 2016).

Description of the Study Cycles, approved by Order No V-1012 of the Minister of Education and Science of the Republic of Lithuania of 16 November 2016 (<u>https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/d32e4f70ad0811e68987e8320e9a5185?jfwid=-9dzqntza2</u>).

The awarded Professional Bachelor's Degree corresponds to the sixth level of the Lithuanian Qualifications Framework and the European Qualifications Framework for Lifelong Learning, as well as the first cycle of the Framework for Qualifications of the European Higher Education Area. The Programme is 180 credits in scope, which meets the requirements of Lithuanian higher education and is sufficient to achieve the learning outcomes. Landscape Design studies are available in a full-time mode, until 2020 the Programme was available to study on either full-time or a part-time basis.

The duration of the full-time Programme is 3 years, allocating 60 credits for each academic year. 30 credits are allocated for the autumn semester and 30 credits for the spring semester (Annex 1).

One semester corresponds to 20 weeks. One study credit corresponds to 25-30 hours of study. Full-time studies are organized on weekdays. From 2020, first-year students are enrolled only to study on a full-time basis (according to the timetables for full-time studies and full-time studies organised in sessions). Part-time studies are conducted for entrants in 2019, 2018 and 2017 (Annex 1). Part-time studies are organized in sessions; between sessions, students study independently in consultation with teachers. During the session, lectures, practical classes, practices, exams, and defence of independent work are conducted.

The scope of subjects within the Programme is not less than 3 credits. There are no more than 7 subjects studied in the Programme per semester.

In the study plan all subjects are divided into three groups according to the types of study subjects: general college study subjects, subjects of the study field and optional subjects. The compliance of the Programme structure with the legal requirements is shown in Table 1.

Types of study subjects	Required by the legislation	Number of credits in the Programme
General subjects of college studies		19
Subjects of the study field (including practice and preparation of the Final Thesis)	a minimum of 120 credits	157
Compulsory subjects of the study field		118
Practice	a minimum of 30 credits	30
Final Thesis	a minimum of 9 credits	9
Optional subject		4
Total		180

Table 1. The compliance of the Programme structure with the legal requirements

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

In order to ensure that the learning outcome of the Programme meet the needs of the labour market, and in cooperation with employers and organisations uniting environmental professionals, the SPC defined the learning outcomes. The Committee also introduced the study subjects, their place in the study plan and the scope needed to achieve the learning outcomes (Annex 4). The subject teachers, whose activities are coordinated by the Department of Landscape Management and Agribusiness Technology, are responsible for the relevance of the content of the study subjects.

General and specific learning outcomes of the Programme are integrated into the content of all subjects and cover the necessary range of professional competences of a Professional Bachelor of Engineering Sciences.

The content of the Programme is periodically updated in line with regulatory changes, insights of the SPC, as well as the results of surveys of students, graduates and employers.

In 2018, in order to achieve a smoother study process and greater flexibility of the Programme, after evaluating 6 years of experience in implementing a modular study programme and making sure that the modular system is not suitable for the Landscape Design studies, the Programme was transformed from modular to subject based. This decision was determined by the size of modules with a scope of a minimum of 10 credits required by the modular programme (currently there are 26

subjects in the Programme with a scope of less than 10 credits). Some modules were artificially formed by combining a number of slightly interlinked subjects, such as: Fundamentals of Landscaping Construction and Economics, Landscaping and Landscape Computer Aided Design, etc.

In 2016, after changes in the legislative provisions (due to the repeal of the branch of Landscape Design from the group of engineering fields of study in the list of study fields and groups of fields, according to which studies shall be conducted in higher education institutions) and after the SPC considered the possible compliance of the Landscape Design study programme with the field of Environmental Engineering, an application was submitted to re-register the Programme in the field of Environmental Engineering. The Description of the Study Field of the Environmental Engineering has not been prepared yet, therefore, the Description of the Group of Environmental Engineering Study Fields was used when formulating the learning outcomes of the Programme.

The Programme is updated on a regular basis. In 2018, the positioning of subjects in the Study Plan of the Programme was optimized (Protocol No 3 of the SPC of 20 January 2018). The amendments were approved by Order No V-88 of the Rector of VK of 27 March 2018. In 2020, specializations were abandoned. The changes were made taking into account suggestions of the social partners, remarks of the Thesis Defence Committee, proposals of the SPC and preferences of students (Protocol No 5 of the SPC of 11 February 2020). The amendments were approved by Order No V-84 of the Rector of VK of 24 March 2020. The Programme with integrated specialization subjects will enable students to acquire more diverse knowledge and skills, broaden their competences and increase employability.

Every year the Department of Landscaping and Agribusiness Technology conducts a number of surveys such as a survey of students about the practice conducted outside the Faculty; a survey of employers on students' preparation for professional activities; a survey of last-year students about the programme; a survey of graduates about the programme they studied, acquired competences and establishment in the labour market; a survey of employers on the need for the study programme, the learning outcomes and content. The observations set out in the Report of the Chair of the Thesis Defence Committee meeting are also taken into account. The results of the surveys are discussed at the meeting of the Department and published on the website of the Faculty (https://atf.viko.lt/studentams/apklausu-rezultatai/)

Twice a year the SPC assesses the need to adjust the structure of student workload, based on the results of student surveys and monitoring of the Programme.

## **1.5.** Evaluation of the totality of the field and cycle study programme subjects which ensures consistent development of competences of students

The aim of the Programme defines the competences of the graduate of the Landscape Design study programme and intended learning outcomes. *General competences*: to be able to communicate effectively with the engineering community and general public; to understand the impact of engineering solutions on the society and environment; to take responsibility for the results of engineering activities. *Subject competences*: to be able to apply the technologies of ornamental plant cultivation; to be able to implement projects of small landscape architectural structures and prepare the part of the design documentation for structures and landscaping elements, which covers the development of architecture and design; to be able to design engineering systems for plantation territories; to be able to design and implement landscaping of residential building land plots and small-scale landscape architectural objects; to be able to carry out management of green spaces.

The groups of learning outcomes to define the study cycle of the Programme, learning outcomes of the Programme and study subjects are presented in Table 2.

 Table 2. Groups of learning outcomes to define the study cycle of the Programme, learning outcomes of the Programme, study subjects

Groups of learning outcomes to define the cycle of studies	Programme learning outcome	Study subjects
A Knowledge	4.2 Apply technological knowledge	Londssoning Engineering 1 2:
<b>A.</b> Knowledge application	of landscaping construction materials	History of Landscape Architecture;
	and processes.	Landscape Architecture 2 - 3;
	4.3. Apply knowledge of engineering	Basics of Landscaping Construction;
	and the individual landscaping fields.	Civil Engineering in Landscaping;
	5.2. Apply knowledge of the stylistic	Business Management and Economics;
	development of landscape	Practice of Maintenance Technologies for
	architecture.	Greeneries;
	5.5. Organise the activities of the	Final Professional Practice
	accounting and management issues.	Final Thesis (Project)
<b>B.</b> Ability to	2.1. Analyse the current situation,	Applied mathematics; Research
carry out a	evaluate the obtained results and	Methodology; Civil Engineering in
research	make decisions.	Landscaping; Landscape Architecture 1, 2;
	2.2. Find the relevant professional	Professional Foreign Language; Basics of
	information using databases and	Communication; History of Landscape
	other information sources in science	Architecture; Soil Science; Lithuanian
	and engineering.	Flora; Engineering Graphics; Architectural
		Graphics; Maintenance Technologies for
		Greeneries; Applied Dendrology;
		Herbaceous Ornamental Plants;
		Measurement Technology for Engineering;
		Computer Graphics; Landscape
		Architecture 3,4; Ornamental Plant Growing
		Engineering 1 2: Enterprise Management
		and Economics: Basics of Landscaping
		Construction: Small Landscape
		Architectural Structures and Site Amenities:
		Civil Engineering in Landscaping. Final
		Professional Practice; Final Thesis (Project)
C. Special	3.1. Characterise biological	Lithuanian Flora; Applied Dendrology;
skills	properties of plants, and regularities	Applied Practice of Dendrology;
	in plant development.	Herbaceous Ornamental Plants; Applied
	3.2. Evaluate plant growth conditions	Practice of Herbaceous Ornamental Plants;
	and choose plant cultivation,	Maintenance Technologies for Greeneries;
	propagation and maintenance	Ornamental Plant Growing Technology and
	technologies.	Engineering; Engineering Graphics;
	4.1. Convey compositional ideas and	Architectural Graphics; Computer Graphics;
	design solutions by means of	Computer Design Practice; Landscape
	engineering graphics.	Architecture 1 - 4; Small Landscape
	4.4. Shape a sustainable landscape	Architectural Structures and Site Amenities;
	structures	Civil Engineering in Landscaping, Measurement Technology for Engineering:
	5.1 Analyse the landscape and	Practice of Maintenance Technologies for
	cherish landscape values	Greeneries: Landscaping Practice: Final
	5.3. Design and implement	Professional Practice:
	landscaping of residential building	Final Thesis (Project).
	land plots and small-scale landscape	····· ( ······························
	architectural objects.	

Groups of learning outcomes to define the cycle of studies	Programme learning outcome	Study subjects
	in accordance with the project.	
<b>D.</b> Social skills	1.1. Work independently and in a team, solve problems, and make decisions.	Basics of Communication; Professional Foreign Language; Research Methodology; Practice of Maintenance Technologies for Greeneries; Herbaceous Ornamental Plants; Measurement Technology for Engineering; Civil Engineering in Landscaping; Applied Practice of Dendrology; Applied Practice of Herbaceous Ornamental Plants; Computer Design Practice; Landscaping Practice; Practice of Maintenance Technologies for Greeneries; Final Professional Practice; Final Thesis (Project).
E. Personal skills	1.2. Understand the importance of personal lifelong learning and prepare for it.	Basics of Communication; Professional Foreign Language; History of Landscape Architecture; Research Methodology; Soil Science; Lithuanian Flora; Engineering Graphics; Architectural Graphics; Maintenance Technologies for Greeneries; Applied Dendrology; Herbaceous Ornamental Plants; Computer Graphics; Landscape Architecture 1; Landscape Architecture 2; Landscape Architecture 3; Landscape Architecture 4; Ornamental Plant Growing Technology and Engineering; Landscaping Engineering 1; Landscaping Engineering 2; Enterprise Management and Economics; Basics of Landscaping Construction; Civil Engineering in Landscaping; Small Landscape Architectural Structures and Site Amenities; Final Professional Practice; Final Thesis (Project).

The learning outcomes of the Programme are based on the Description of the Group of Engineering Fields Study (https://www.e-tar.lt/portal/lt/legalAct/ of 8300a570584a11e5825682aa0fc6b8d5/asr) and Professional Requirements (Law on Greenery of the Republic of Lithuania (https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/TAIS.301807); Law on (https://e-seimas.lrs.lt Environmental Protection of the Republic of Lithuania /portal/legalAct/lt/TAD/TAIS.2493/asr); Law on Construction of the Republic of Lithuania (https://eseimas.lrs.lt/portal/legalAct/lt/TAD/TAIS.26250); Law on Protected Areas of the Republic of Lithuania (https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/TAIS.156931), etc. Learning outcomes help to determine how and at what level a student has acquired certain competences. They are specific and clear, formulated objectively, and are realistic in terms of implementation. The main learning outcomes allow to pursue the aim of the Programme in a consistent manner. The learning outcomes are compatible with each other, complement each other, do not repeat and form a set of necessary skills. Compliance of the Programme learning outcomes with the learning outcomes of college studies introduced in the Description of the Engineering Fields of Study is provided in Annex 8.

Cumulative assessment applied in VK means an assessment of academic achievements based on the learning outcomes of a certain subject when the final evaluation is received by adding evaluations of components of cumulative assessment (interim examinations(s) and final examination) multiplied by the assigned weighted coefficients. The study methods and methods to assess learning achievements, which allow to measure the learning outcomes achieved by students, are chosen depending on the study subject and its learning outcomes. Integrated active teaching / learning methods are applied in the study subjects. Practices, independent tasks, and practical classes develop students' ability to apply theoretical knowledge in practice, develop professional and general competencies, and allow to achieve the intended learning outcomes. For example, a series of methods, such as group work, designing, case studies, scientific literature analysis, practical work, critical thinking, as well as appropriately selected assessment methods, such as exam, presentation of a practical activity report, delivering a presentation and assessment, teach students to understand interim study aims and assessment criteria, and to participate in assessment decisions. Students are given feedback that allows them to articulate their needs and expectations in order to improve the quality of their studies and satisfy wishes of stakeholders. The links between the learning outcomes of the Programme, learning outcomes of subjects, study methods, and assessment methods of student achievements are presented in Annex 5. The learning outcomes of individual subjects, which are laid out over several semesters, complement each other and enable the student to effectively achieve a learning outcome of the Programme.

As stated above, graduates of the Programme are prepared and work in the professional field of landscaping, which combines engineering, art and botany. Therefore, multidisciplinarity is also reflected in the Programme plan. The links, sequences and scopes of subjects are based on the intended learning outcomes.

Sequence of teaching the subjects in semesters is based on the sequence of studying consistently interlinked subjects. Compulsory subjects of the study field are taught in the 1–6 semesters. Subjects that provide basic knowledge, which becomes an important basis for further studies are taught primarily: *Engineering Graphics, Architectural Graphics, Applied Dendrology, Herbaceous Ornamental Plants, Lithuanian Flora, Soil Science, Basics of Landscaping Construction.* In subsequent semesters, subjects are based on knowledge and skills of the subjects outlined above: *Landscaping Engineering 1, Landscaping Engineering 2, Landscape Architecture 1, Landscape Architecture 2, Landscape Architecture 3, Landscape Architecture 4, Computer Graphics, Maintenance Technologies for Greeneries, Measurement Technology for Engineering, Ornamental Plant Growing Technology and Engineering, Small Landscape Architectural Structures and Site Amenities, Civil Engineering in Landscaping, Enterprise Management and Economics, Environmental Design and Protection. The content of the taught subjects is compatible with each other. This allows the gradual pursuit of learning outcomes.* 

General subjects of college studies are taught in the 1-3 semesters: *Professional Foreign Language, Basics of Communication, Applied Mathematics, Research Methodology, History of Landscape Architecture*, which develop a responsible, creative, active and civic personality capable of communicating and presenting arguments clearly and cohesively.

The interrelations of the study subjects in the Programme are prominently reflected in the subject descriptions, which indicate the necessary background knowledge for the subject studies.

Student surveys are conducted after each subject is completed, and if necessary, the improvement of the subject content and changes in the quality of teaching are considered. For example, teaching of Adobe Photoshop, SketchUp programmes, that are often used in landscaping companies, was included into the *Computer Graphics* subject

Practices are set out in the second, third and forth semesters: Applied Practice of Dendrology, Applied Practice of Herbaceous Ornamental Plants, Computer Design Practice, Landscaping Practice, Practice of Maintenance Technologies for Greeneries, Final Professional Practice. The Final Practice is performed in the fifth and sixth semesters. Practical training in companies ensures the links between theoretical knowledge and real professional activity. In order to improve the performance of practices, the list of companies for the practice is updated every year, after summarizing the results of the students and employers' practice surveys.

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

Students have the opportunity to choose a 4 credit optional subject from the list of all optional subjects offered by the Faculty: Website Development Tools and Management; Food Analysis; Non-Traditional Crop and Livestock Production; Farm Animal Health; Technology and Equipment for Fruit and Berry Storage and Processing. In the next academic year, it is planned to provide students with a general list of all optional subjects offered at VK.

The Description of the Procedure for the Recognition of Competences Acquired Through Formal Education at VK (<u>https://www.viko.lt/media/uploads/sites/3/2014/07/Kompetenciju-pripazinim-aprasas\_2017-12-1.pdf</u>) determines the principles and procedure for the recognition of competences acquired through formal education as a part of the study programme conducted by VK. The student submits an application to the Dean for recognition of the desired competences and submits a vocational training diploma or qualification certificate and its annexes, which certify that the person has acquired a qualification of at least level 4, and a description of the vocational training programme (module) (if it is not available on the Internet).

The mentor of the programme makes a decision on the recognition of the competences acquired by the person.

Competences acquired by a person are recognized as a similar study subject provided in the Programme, if they substantially correspond to the learning outcomes and aims of the subject.

Subject competences acquired through non-formal and informal learning may be assessed and recognized in the study process in accordance with Order of the Rector of VK on the "Description of the Procedure for Assessment and Recognition of Non-formal and Informal Learning Achievements at VK" (https://atf.viko.lt/media/uploads/sites/6/2020/11/Neformaliojo-%C5%A1vietimo-ir-savi%C5%A1vietos-b%C5%ABdu-%C4%AFgyt%C5%B3-kompetencij%C5%B3-vertinimas-ir-pripa%C5%BEinimas-converted.pdf). Assessment of learning achievements is based on the model of the learning achievement portfolio method.

At the request of advanced students, after the first semester, an individual study plan may be drawn up for them by order of the Dean. The draft of the individual study plan for a semester is prepared by the student in coordination with the subject teacher, and approved by the Dean of the faculty (The Description of Procedure of the Studies According to an Individual Study Plan https://www.viko.lt/media/uploads/sites/3/2014/07/Individualiu-ST-tvarkos-aprasas-VK\_ST\_10-24.pdf).

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

The Description of the Procedure for the Preparation and Defence of Final Theses (Projects) at VK (https://www.viko.lt/media/uploads/sites/3/2014/07/BD\_tvarkos\_aprasas\_2020-062021\_02-sav-patikra.pdf) determines the procedure for the preparation, review and defence of final theses (projects) in the Department and Thesis Defence Committee. The methodological recommendations of the final theses are presented publicly on the Faculty page (<u>https://atf.viko.lt/studentams/diplomantams/</u>).

In the 2020–2021 academic year, the last generation of the part-time student group that could choose the specialisation from the two offered: *Small Greenery Architecture* and *Decorative Horticulture*, is completing the studies. As many students wanted both specialisations, changing the structure of the Programme from modular to subject, the specialisations were abandoned, and subjects from both specialisations were included into the Programme, e.g. *Ornamental Plant Growing Technology and Engineering*, Small Landscape Architectural Structures and Site Amenities, Civil Engineering in Landscaping.

The observation of the Chair of the Thesis Defence Committee to focus more on estimate calculations and economics was also taken into account. For estimate calculations, we have invited practitioners from UAB "Stebulė", and the integrative lectures on enterprise management and economics were given to students by an entrepreneur, the owner of "Citus Group", one of the largest real estate developers, the owner of "Profitus", the ten best start-ups in Lithuania. He shared practical examples of the business environment, company strategy and management, development opportunities, principles of sustainable leadership, etc.

The final thesis is independently prepared for public defence at the Thesis Defence Committee. Students can choose the topic of the final thesis from the areas of the problematic research field of the final thesis, published by the Department supervising the Programme. The topic of the thesis, the problematic field area is proposed by the student in coordination with the Department and the supervisor of the final thesis.

When preparing the final thesis, the student must practically link the knowledge and skills of the general and study field subjects he studied, and acquired practical experience - analyse, systematize all collected data, provide conclusions and practical recommendations, manage graphic design programmes, disclose independence and creativity, and prove the level of qualification and professional training. The student must also demonstrate general skills: the level of activity, critical thinking, systematic approach to work, problem solving, ability to communicate, collaborate and make decisions, find the necessary professional information using databases and other sources of scientific and engineering information.

The topics of the final theses are presented in Annex 2. The preparation of the final thesis, its defence and assessment summarize the general and subject competences acquired by the student. Every year, there are some theses, which are prepared according to the orders of the companies (Annex 2).

In the 2019–2020 academic year, during the Covid-19 pandemic, the process of preparation and defence of final theses took place in the MS TEAMS environment.

Students who were unable to work with their computers were given the opportunity to connect remotely from the Faculty computer classroom.

In 2021, VK introduced a programme for checking citations (plagiarism) in final theses.

If the student does not defend the final thesis, conditions are created to defend the thesis at the next meeting of the Thesis Defence Committee, but not earlier than after one year.

Every year, the Chair of the Thesis Defence Committee prepares a report, which presents the advantages of the theses and the aspects and proposals, which are in need of improvement.

	Expert recommendations provided during the last external evaluation related to Study aims, outcomes and content					
	Recommendation	Actions taken by the HEI	Comments			
1.	Having regard to a high level of greenery design education and ambitious goals, the number of design (landscape architecture) lectures in the Programme should be increased.	The scope of the Landscape Architecture subject has been increased by 15 credits.				
2.	The focus on the design sector and the maintenance of green spaces in urban areas, as well as dendrology should be strengthened.	Strengthening the design aspects of the Programme, the study content was supplemented with new topics and new subjects. The scope of the Dendrology subject has been increased by 1 credit; in addition, 4 credits were allocated for the Practice of Dendrology. Additional 4 credits were allocated for the Practice of Maintenance Technologies for Greeneries.				
3.	It is proposed to increase the number of hours of the <i>Materials</i> <i>Science</i> .	The number of hours for the Basics of Landscaping Construction and Civil Engineering in Landscaping subjects has been increased.				
4.	The number of practical classes in the plant nursery should decrease.	In 2017, the Ornamental Plant and Planting Centre <i>VikoFlora</i> was established, and its employees perform all the work in the nursery.				
5.	Restoration of historic gardens / parks could become a challenging but promising orientation in the future.	Restoration of historic gardens / parks is assigned by law to a specialist with a university degree.				
6.	Efforts to introduce lectures in English should be intensified.	The Programme has been translated into English, and some subjects are offered in English.				

	Expert recommendations provided during the last external evaluation related to Study aims, outcomes and content					
	Recommendation	Actions taken by the HEI	Comments			
7.	Virtual learning opportunities should be expanded.	For distance learning the <i>Microsoft Teams</i> application is used, and a virtual learning environment – <i>Moodle</i> .				
8.	More attention should be paid to the development and improvement of communication skills.	This is done by choosing from a wider range of active teaching methods, e.g. group work, expert method, mosaic, etc. Also, when teaching the subject of Communication, additional attention is paid to the development of communication skills.				

### Please provide main results of the self-evaluation in the area of Study aims, outcomes and content

#### Strengths

When identifying the need for the Programme, aims of the Programme and the possibility to implement it, the expectations of potential employers and society were taken into account, as well as changes in the labour market, graduates' evaluations, scientific development, new technologies, national and EU documents regulating the preparation of study programmes. The learning outcomes are related to the identified general and subject competences, which were defined on the basis of the results of studies that have been carried out.

#### Areas for improvement

More active involvement of social partners in the implementation of the study process and preparation of final theses.

#### 2. Links between science (art) and study activities

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

The evaluation of VK research, experimental development and artistic activities is carried out in accordance with the Provisions of the Annual Assessment of Research and Experimental Development and Artistic Activities of Colleges (https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/ 68769782af1411e9b43db72f2154cfa0?jfwid=-ebwr1wtta). The results of research and experimental development and artistic activities carried out in the colleges, for which additional funding is provided to colleges, are subdivided into the following subgroups: scientific works; outsourced project based activities and applied arts activities; other outsourced project based activities (monitoring, analysis, research study); provision of additional competences, qualification improvement, seminars; consultations; other educational activities. Funds are allocated only for outsourced activities (excluding research), i. e. those for which external funding has been provided, and VK can justify such funding by contracts and receipted invoices. The evaluation procedure, laid down in the Regulation, eliminates unpaid activities.

By Order of the Rector of VK "On the Approval of the List of Research Teams and Their Coordinators by the Field of Research in 2019-2020" groups of researchers were formed according to scientific fields. A team of researchers from the Department refined the research priorities, which were included in the VK Guidelines for Applied Research, Experimental Development and Art Activities in 2020–2022.

In 2016–2017, the Head of the Department supervising the Programme participated in the Action Management Committee of the COST (European Cooperation in Science and Technology) TD1304 programme "The network for the biology of zinc (zinc-net)", and with international partners conducted a study "Zinc concentration in various compost and accumulation in compost fertilized plants" (Comparative analysis of zinc concentration in various Lithuanian and Greek crops).

An important area of research of the Department teachers is the research of rare and protected plants in Lithuania. Applied research is carried out in order to identify growth possibilities for rare and protected plants in urban areas. Students carry out plant observations in the collection of protected plants, prepare final thesis projects. Field experiments of medicinal horse mackerel (Gratiola officinalis) and medicinal hard grain (Lithospermum officinale) were performed in the educational nursery, modelling different growth conditions. Head of the research was Dr. G. Palaitytė, researchers - Dr. O. Motiejūnaitė, Dr. R. Kondratienė.

In 2017–2019, an applied study "Use of Mineral Mulch in Naturalistic Greenery" was conducted. Head of the research was Dr. R. Kondratienė, researchers - Dr. G. Palaitytė, PhD candidate I. Jančauskienė, R. Kondratas. Students of the Landscape Design study programme participated in all stages of the experiments.

Currently, the research "Assessment of the Biological Potential of Plants Grown in Vertical Systems" is being carried out. The research is included into the VK Programme of Applied Research, Experimental Development and Art Activities. Head of the research is Dr. G. Palaitytė, researchers - Dr. N. Liepienė, Dr. D. Ryliškis, Dr. O. Motiejūnaitė, Dr. R. Kondratienė, PhD candidate I. Jančauskienė. Purchased equipment: N-PEN - nitrogen plant meter; Plant Pen NDVI 310 - for measuring the amount of photosynthetic pigments; Plant Pen PRI 210 - a measure of growth productivity and stress. The beginning of research activities – 1 April 2020, and the end of activities – 1 December 2023. Students of ZDI19, ZD18 groups are involved in the research. The methodology of this research has been prepared, and on the basis of this methodology an application was submitted to the Lithuanian Science Council together with the researchers of the Lublin University of Life Sciences. DAINA2 - POLISH-LITHUANIAN FUNDING INITIATIVE CALL FOR PROPOSALS 2020, "Optimization of vertical planting technologies to improve environmental conditions in Polish and Lithuanian cities", Registration No P-LL-21-88.

During the applied research activities, it is planned to make some money from outsourced consulting activities, professional development courses, by holding educational theoretical and practical seminars for the public. In 2020–2021, the members of the Department have planned 4 consultation seminars.

The teaching staff of the Department carry out projects related to the principles of a sustainable society, development of ecological self-awareness by researching the environment. In 2017, the project "Development of Natural Science Competence in Vilnius Citizens by Researching the Environment" was implemented (Vilnius City Municipality, Financing Contract No A72-1098117 (3.1.36-TDZ)). During the project, a diversity of living nature, causes of its extinction and protection, evolution of the natural environment, development of human-landscape relations, and changing trends were examined. Participants got acquainted with the problems of landscape protection, learned to observe the change of the landscape, distinguish its elements, colours and even smells; studied the aquatic ecosystem, its condition, aquatic animals and their peculiarities, got acquainted with the diversity of algae, water quality bioindicators. The participants of the project were the communities of educational institutions in Vilnius city. In 2018, the project "Nature Research in an Educational Institution by Developing a Person's Natural Science Competence" (Vilnius City Municipality, Financing Contract No A291-1512 / 18 (2.2.1.95-TD2)) was undertaken. Project participants examined issues of environmental pollution such as air quality assessment according to the characteristics of fungi, lichens and plants, and the use of green educational spaces in the development of environmental education.

In 2018, we participated, as a partner, in the preparation of the Erasmus + strategic partnership project "Urban Gardener - Fostering Competences for Inclusive and Green Cities" (Erasmus + Strategic Partnership - ADULT). The project coordinator was AIFORIA (Germany); the project was not funded, but it was a significant experience in cooperation with foreign partners. The accumulated experience of cooperation enabled the Department of Landscape Management and Agribusiness Technologies in 2019 to submit the Erasmus + project "Innovative Rain Gardens' Methodologies in Training of Environmental Design Specialists" (Erasmus + KA202 - Strategic Partnerships for vocational education and training). During the preparation of the project, cooperation was established with the following foreign and Lithuanian scientific institutions: DEULA-Nienburg GmbH in Germany, National University of Life and Environmental Sciences of Ukraine, University of Agriculture in Nitra, Slovakia, Institute of Technology in Beja, Portugal (Instituto Politécnico de Beja, Portugal), The Estonian University of Life Sciences, Tartu, Public Institution Vilnius Builders Training Center, Zarasai Vocational School, however, the project did not win funding.

In 2019, the project "Facilitation Methodologies for Innovative Learning and Teaching in Higher Educational Organizations" (Erasmus + KA203 - Strategic Partnerships for higher education) was submitted. The planned partners of this project were: Polytechnic Institute of Porto, Portugal, The Latvia University of Life Sciences and Technologies, Jelgava, University of Valladolid, Spain, The Slovak University of Agriculture in Nitra, but the project did not win funding.

In 2019, the international project "Refurbishment Design Proposals of Ozas Park in Vilnius" was carried out (No AT V1-19 of 16 October 2019). Participants: Professors, lecturers and students of the Faculty of Horticulture and Forestry at the Banat University of Agricultural Sciences and Veterinary Medicine in Timisoara, Romania (Universitatea de Stiinte Agricole si Medicina Veterinara a Banatului din Timisoara). During the project, an international team prepared project proposals for the renovation of Ozas Park in Vilnius. Project proposals for the renewal of the park (general design of the park, plants, paths, water features, lighting, small landscape architectural structures) were presented in Vilnius City Municipality. It is planned to continue the activities of the joint project.

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

The content of the Programme is constantly updated in line with the latest scientific and technological achievements, which become available to teachers who actively participate in national and international scientific conferences, ECLAS activities and cooperate with other scientific institutions.

Teachers include the results of research in the content of the taught subjects, for example, to the subject of *Ornamental Plant Growing Technologies and Engineering* innovative ornamental plant growing technologies were included, to the *Soil Science* subject - review of soil humus restoration research, to the *Landscape Management and Environment* subject - landscape monitoring, scientific substantiation of biodiversity conservation.

When teaching study subjects, problem based practical tasks are formulated, on the basis of which discussions take place, revealing the integration of research results into the learning process. Students prepare written works, which are presented to the group, the results are discussed and interpreted. Students' research competences are developed by studying the *Research Methodology* subject.

During practical classes, students are encouraged to prepare potential research programmes, where they analyse problematic landscaping management situations, identify a topic, and envisage research results.

The educational nursery sets up the conditions for the implementation of self-created research projects and carry out research. These are major research carried out by students: Study of Flavonoids in Black Elderberry (Sambucus nigra) Depending on Habitat, Application of Thyme (Thymus Serpyllum) in Green Spaces, Study of Growing Herbaceous Ornamental Plants in Mineral Substrate, Study of the Effect of the Biological Preparation "Baikal EMI" on the Growth of Sprouts and Seedlings.

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

The Faculty has a laboratory for applied research, where students shape the skills of researchers and conduct research. Every year the Faculty holds a scientific conference(s) where students make presentations and write articles, for example, "Flavonoids in the Fruit of Black Elderberry (Sambucus nigra)", Variation of Flavonoids in Sambucus Nigra Fruits Growing in Different Habitats", "Application of Simple Thyme (Thyme Serpyllum) in Urban Green Spaces", "Selection of the Range of Plants Grown in Vertical Systems", "Energy Plants in Green Spaces", "Plants Capable of Promoting Spontaneous Soil Self-Cleaning Processes", "Application of 3D Printer in Landscape Design", etc.

The Student Scientific Society (hereinafter SSS), operating in the Faculty, unites students who actively conduct applied research and seek to improve knowledge and practical skills. Students of Landscape Design also participate in the activities of the SSS.

Students participate in various activities that develop the competence of a sustainable society and a person's ecological self-awareness. European Waste Reduction Week has become a tradition. Together with the teachers of the Department, students participate in the expeditions of the the social club "Medumėlė" (preservation and cognition of rare species): "Biodiversity and Cultural Heritage of Akmenė District and Venta Regional Park" in 2017; "Biodiversity and Cultural Heritage of Vygriai National Park" in 2018; "Biodiversity and Cultural Heritage of Dzūkija National Park" in 2019. Students also independently participate in volunteer programmes and internships in Lithuania and abroad (e.g. international group volunteering in Italy, intercultural sustainability and recycling factory FIERi).

	Expert recommendations provided during the last external evaluation related to					
	Links between science (art) and study activities					
1.	Recommendation	Actions taken by the HEI	Comments			
	None	-	-			

### **Please provide main results of the self-evaluation in the area of** Links between science (art) and study activities

#### **Strengths**

Students of the Programme are involved in applied science and social responsibility activities. Teachers of the Programme actively participate in project activities.

Areas for improvement

Development of applied research. In order to expand the scope of research, we need to purchase additional laboratory equipment.

### **3. Student admission and support**

# **3.1.** Evaluation of the suitability and publicity of student selection and admission criteria and process

Admission to the first cycle studies at VK is carried out in accordance with the General Admission Procedure. The general admission is organized and coordinated by the Lithuanian Association of Higher Education Institutions authorized by Order of the Minister of Education, Science and Sports of the Republic of Lithuania to organize General Admission (hereinafter referred to as LAMA BPO). Only persons whose learning achievements are not lower than the minimum requirements approved by the Minister of Education, Science and Sports can apply for the first cycle studies at higher education institutions.

The competitive score is formed in accordance with the Description of the Procedure for Setting Up the Competitive Queue for Entrants to the First-Cycle Studies approved by Order of the Minister of Education, Science and Sports of the Republic of Lithuania. The minimal competitive entrance score to state-funded and non-state-funded places was set to 1.6 in 2017, 2.0 - in 2018, and 4.3 in 2019-2021.

Student admission rules are discussed and approved by the VK Academic Council every year and published on the VK website (https://www.viko.lt/stojantiesiems) and on LAMA BPO website (www.lamabpo.lt).

The competitive score of the entrants to the Landscape Design study programme in 2020 consisted of the assessments of the Matura examination in Mathematics (coefficient 0.4), Matura examination in Lithuanian language and literature (coefficient 0.2), Matura examination in Physics or Chemistry (coefficient 0.2), Matura examination in another subject or annual average mark (coefficient 0.2). The principles of calculation of the competitive score of entrants, assessment of individual maturity examinations and crediting and recalculation of annual marks are mentioned in the Order of the Minister of Education, Science and Sports of the Republic of Lithuania. The provided Student possibility award extra points is in the Admission Rules to (https://www.viko.lt/priemimas-2021-m/).

The procedure for student selection and admission is made public in the following ways: on the VK website – Student Admissions; on the Lamabpo.lt website; at thematic exhibitions and fairs: *Studies* in Vilnius, *Higher Education Fair* in Kaunas; *Open Days in VIKO* (Vilnius); in the magazine *Where to Study?;* in the magazines *Rasos, Savaitė, Namai ir sodas*; in meetings with students and social partners; when advising students e.g. via email, telephone; at the International Agricultural Exhibition *What You Sow...* in Kaunas; at the plant fair *Lietuvos žiedai* organized by the Florists' Union; and at the "VikoFlora" plant fair organized by the Faculty. In order to encourage interest in young people in the Programme, the Faculty organizes *Open Days*, organises meetings with students in schools where the Faculty teaches conduct classes, holds events that promote studies and the Programme.

When applying for studies, entrants indicate the preferred type of funding: state-funded study place (vf), non-state funded study place (vnf), non-state funded study place with a scholarship to study (vnf/st). Data on student admission to the Programme are presented in Table 3.1.1.

	Number of	Number of	Number of students who have conclude		
Vaar	applications	applications	agreements		
rear	submitted on a first	submitted according	f	unf	
	choice basis	to all preferences	V1	VIII	
2017	20	114	13	5	
2018	20	105	6	5	
2019	17	89	12	1	
2020	51	169	9	6	

Table 3.1.1. Number of submitted applications and students in the Programme who have concluded agreements in 2017–2020 Full-time studies

In 2020, interest in the Landscape Design study programme increased significantly, however, a proportion of those wishing to study did not reach the minimum competitive score. In 2020, admission to the part-time study mode was not carried out.

	Number of applications	Number of	Number of students who have conclude	
Voor	submitted on a first choice basis	applications submitted	agreements	
I cai		according to all preferences	vf	vnf
2017	20	92	10	7
2018	20	84	8	6
2019	24	80	9	6

 Table 3.1.2. Number of submitted applications and students in the Programme who have concluded agreements in 2017–2019 Part-time studies

The analysis of the competitive scores of the students admitted to the Programme in a fulltime mode of studies shows that the competitive score of the last admitted student has been increasing since 2017.

Data on the competitive scores of students admitted to the Programme are presented in Table 3.1.3. Competitive scores of entrants indicate adequate readiness of persons for studies. The increasing average competitive score of admitted students shows that these studies are chosen by young people who are better prepared for studies, who will be able to study, and after graduation will do a job that requires higher education.

Table 3.1.3. Competitive scores of students admitted to the Programme in 2017–2020 Full-time studies

Voor	Competitive score of the first	Competitive score of the last	Average competitive
Ieal	admitted student	admitted student	score
2017	8.20	1.68	3.05
2018	8.36	2.04	3.53
2019	7.16	4.47	5.00
2020	8.48	4.36	6.44

The analysis of the competitive scores of students admitted to the Programme in part-time mode of studies (Table 3.1.4) shows that the competitive score of the last admitted student has increased since 2017. The average competitive score of students admitted to part-time studies in 2017–2019 was higher than that of students who chose full-time studies.

Table 3.1.4. Competitive scores of students admitted to the Programme in 2017–2019Part-time studies

Veer	Competitive score of the	Competitive score of the	Average competitive
I eal	first admitted student	last admitted student	score
2017	8.18	1.62	3.73
2018	8.56	2.00	5.08
2019	8.92	4.61	6.42

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

Recognition of the learning outcomes of partial studies and practices acquired abroad is regulated by the Description of the Procedure of Crediting Learning Outcomes at VK. The learning outcomes of a person who has studied at another Lithuanian or foreign higher education institution under a partial studies agreement are credited without restrictions, unless violations of the requirements of the agreement or other document, according to which the study content has been agreed, are detected.

In 2017-2018, learning outcomes were credited to 5 students who studied in other Lithuanian higher education institutions, in 2018-2019 - to 21 students, in 2019-2020 - to 23 students. In 2017-2020 competences acquired through formal education were recognized to 4 students.

In 2017-2020, 83 ECTS credit scope subjects (modules) have been credited according to Erasmus + studies or practices. There were no cases of non-recognition of learning outcomes or non-recognition of professional competences.

#### 3.3. Evaluation of conditions for ensuring academic mobility of students

International student exchanges provide an opportunity to acquire part of the learning outcomes in a foreign institution according to a coordinated programme, gain deeper understanding of others' cultures, and improve foreign language skills. The main tool for student mobility is the Erasmus + programme. Information on the conditions and opportunities for participation in this programme is published on the VK website (<u>https://www.viko.lt/tarptautiniai-rysiai/</u>).

Information seminars on the Erasmus + programme are held at the beginning of each semester. All students receive an invitation to attend this seminar by e-mail. The same letter also contains information about the Faculty Erasmus Coordinator, his contacts and consultation time. In the case of a question, students can also contact the Project Manager of VK International Relations and Projects Office, who coordinates the mobility of outgoing students. The Erasmus Coordinator of the Faculty helps students to establish contact with a foreign partner and prepare documents necessary for participation in the Erasmus + programme. After the study period abroad, students submit documents certifying the duration and assessment of the subjects studied, and fill in a descriptive student exchange report.

Mobile students studying in places not funded by the state are exempted from the obligation to pay the tuition fee during the mobility period.

Outgoing students are motivated for mobility by lecturers from foreign higher education institutions who arrive during international weeks and give lectures for specific academic groups. When returning from teaching mobility visits at foreign higher education institutions, the Programme teachers share information about a specific higher education institution. This is one of the tools to increase the motivation of outgoing students for academic mobility. After returning from the mobility phase, students share good practice, which is published on the Faculty website.

The Faculty has signed agreements with the following institutions to implement the Erasmus + programme: Anhalt University of Applied Sciences, The University of Greifswald, The Polytechnic University of Valencia, University of Genova, Università degli Studi di Milano, University of Pisa, Latvia University of Life Sciences and Technologies, Slovak University of Agriculture in Nitra, Mustafa Kemal University and others.

Student mobility within the Erasmus + programme is presented in Table 3.3.1.

In the 2017–2018 academic year, the students of the Programme were active enough, as 5 students took up an Erasmus practice placement. In 2018/2019, only one student chose an Erasmus practice placement.

In 2019/2020, four students of the Programme won the selection procedure for the Erasmus practice placement, and two of them for studies. Due to the pandemic in 2020 only one student took up an Erasmus practice placement at DEULA-Nienburg, and one student took the opportunity for studies at Anhalt University of Applied Sciences. Three students have not left for practice at Green Maze Design SRL in Timisoara, Romania, and studies at the Slovak University of Agriculture in Nitra, Slovakia have been withdrawn for one student. According to the Integrated Development

Strategy Implementation (Action) Plan for 2020, a 5 per cent ratio of mobile students to total students was expected. The Covid-19 pandemic has prevented from reaching the target.

Student surveys on reasons preventing from travelling abroad on student exchange programme were conducted. Students mentioned the following reasons: cannot leave because of health problems, cannot stay away from work, cannot leave due to family circumstances, insufficient English language skills, etc.

Vaama	Outgoing students		
Tears	Practice	Studies	
2017-2018	5	-	
2018-2019	1	-	
2019-2020	4 (1)	2 (1)	

Table 3.3.1 Erasmus student mobility

We did not have any incoming Erasmus students over the last three years under consideration. In the previous years, we had three students from the Slovak University of Agriculture in Nitra, Slovakia, and two students from Banat University of Agricultural Sciences and Veterinary Medicine of Timişoara, Romania.

There was one student in 2017-2018, and one students in 2018-2019 wishing to come, however, they did not come up with the necessary documents. The Landscape Design study programme offers subjects taught in English during the autumn and spring semesters. Subject descriptions are prepared in English. Information for incoming students is available on the VK website in English.

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

The interests of the VK students are represented by the Student Representation, which is legally independent. Student representation is ensured in the Academic Council and VK Board: there is one student in the VK Board and seven students in the Academic Council, who are representing all faculties. Student representatives are members of the Faculty Councils, Teacher Competition and Attestation Commissions, and Study Programme Committees.

Career advisory and information services for students are provided by the Career Centre. Students are consulted on practice and job search issues, they are provided with knowledge of the situation in the labour market and career planning. The Career Centre contributes to the development of students' entrepreneurial competences.

From 1 January 2017, the VK students have the possibility to obtain free advice from a psychologist.

The Physical Education and Sports Centre coordinates students' physical education, sports and health activities, makes it possible for students to strengthen and maintain their health, attend exercises in their favourite sport, and participate in competitions.

Students can fulfil artistic self-expression in the VK ensembles Voruta, Želmuo, girls' choir Vaidilutės.

Students who have entered VK and live outside Vilnius, are given the opportunity to stay in a dormitory (Dormitory No 4 for the Faculty of Agrotechnologies and Faculty of Pedagogy).

Financial support for students is regulated by the following documents: Law on Science and Studies of the Republic of Lithuania; Description of the Procedure for Grating, Administering and Repaying State Loans or State-Supported Loans; Description of the Procedure for Granting of State Support for the Studies of Foreigners of Lithuanian Descent at Lithuanian Schools of Higher Education; Description of the Procedure for Granting of State Support for the Studies of Children and Grandchildren of Expatriates and Foreigners of Lithuanian Descent at Lithuanian Schools of Higher Education; Description of the Procedure for Granting of Targeted Benefits for the Studies of Disabled Students at Lithuanian Schools of Higher Education; Description of the Procedure for Awarding and Administering Social Scholarships for Students of Higher Education Institutions; Regulations of Scholarships and Benefits of Vilniaus kolegija/ University of Applied Sciences; Description of the Procedure for Changing the Nature of Study Financing.

In 2017, a total of 487,200 Euro was given to the students of the Landscape Design study programme from the scholarship fund: 359,062 Euro as incentive scholarships, 29,106.60 Euro as bonuses, 1,254 Euro as one-off social benefits.

Nominal scholarships are awarded to talented students, especially those who are distinguished in their studies, scientific and social activities. Every year students of the Programme apply for a President's Jonas Žemaitis Scholarship (in the group of study field of engineering sciences and the group of study field of technological sciences). In 2017, one second-year student won the scholarship, in 2019, one second-year student won the scholarship, in 2020, one second-year student won the scholarship.

In 2017, the State Studies Foundation (hereinafter referred to as the Foundation) awarded social scholarships to two students in the spring semester, and to two students in the autumn semester. In 2018, one student applied for a social scholarship in the spring semester, six students applied in the autumn semester, and a total of six students were awarded scholarships. In 2019, in the spring semester, one student applied for a social scholarship, in the autumn semester another four students, and a total of five social scholarships were awarded.

The Foundation awarded a targeted scholarship to people with disabilities. A total of one scholarship was awarded to one student in the autumn semester of 2018, in the spring and autumn semesters of 2019, and in the spring semester of 2020.

The most advanced students are given the opportunity to occupy a state-funded place when it becomes open. On average, 1-2 state-funded places are filled by 1-2 students in the spring semester. Actually, more Landscape Design students meet the criteria of a high-achieving student, and could occupy vacant state-funded places, however, they are repeatedly doing the study programme, which belongs to the same or lower cycle of studies, and have already acquired more than half of the programme credits from the State budget.

Students of all study modes are provided with academic support from teaching and administrative staff. Academic support contributes to coherent and targeted achievement of the learning outcomes. By receiving academic support, students feel fully fledged participants in the study process, are responsible and

demanding of the knowledge and skills they acquire, and develop attitudes towards lifelong learning.

#### 3.5. Evaluation of the sufficiency of study information and student counselling

The Faculty teaching staff provides students with academic support during consultation hours, by email, or in a virtual learning environment *Moodle*. The timetable of consultation is approved by the Dean of the Faculty and published on the Faculty website. This timetable includes consultations, which are obligatory, for which contact hours are allocated; in the event of a necessity, teachers consult students after lectures or at the agreed time, both individually and in groups, by e-mail, or in a virtual learning environment.

The Study Department advises and assists teachers and students in organising a coherent study process. The Study Department and the Department carry out constant monitoring of students' progress, contact students who have not participated in the interim or final assessments, as well as students with learning difficulties or academic debts, and help them find appropriate ways to cope with the challenges.

The Faculty organizes curators for first-year students' adaptation in the academic and social environment. They are usually chosen from the second or third-year students. At the beginning of each year during the Welcome Week, information seminars on studies, study programmes, international mobility, and opportunities for self-expression are organized for first-year students of both study modes. During the first semester, the Head of the Study Department meets again with the first-year students to make sure that they are aware and understand all relevant information. If any changes in documents regulating studies take place, or new documents are approved during the academic year, the information about the changes is sent to each student personally by e-mail.

The Faculty provides academic support to students. Students are consulted by the teachers in the departments at defined times, student consultancy in the electronic study environment is being developed. Timetables of the consultations are approved and published on the Faculty website.

Library staff regularly advises students on the use of the electronic catalogue Aleph, databases, information search, and other issues.

Students are consulted on career planning issues by the VK Career Centre. Job offers and advertisements are published on the Faculty website, sent to students by e-mail.

Every year in the spring semester, the Faculty administration (the Dean, Vice-Dean, Head of the Study Department, Manager) organizes round table discussions with first-year students. The purpose of these discussions is to get feedback on the efficiency of the organization of the Welcome (Academic Information) Week, evaluation of the quality of studies, problems and difficulties of adaptation, etc. If required, round table discussions are organized not only with first-year students, but also with second and third-year students. In the autumn semester of 2018, a round table discussion was held with the social partners of the Department, employers, graduates of the Programme, teaching staff of the Department and the Faculty administration. There is also the possibility to write letters anonymously to the Faculty administration on the VK website.

Expert recommendations provided during the last external evaluation related to			
	Student admission and support		
	Recommendation	Actions taken by the HEI	Comments
1.	None	-	-

<b>Please provide main results of the self-evaluation in the area of</b> Student admission and support		
Strengths		
Students have access to academic, financial and psychological assistance. The students of the Programme win President's Jonas Žemaitis Scholarship almost every year. The average competitive score of students admitted to the Programme increases.		
Areas for improvement		
To increase the number of incoming foreign students, coming for a semester studies or practice.		

### 4. Studying, student performance and graduate employment

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

Since 2020, the Programme is available to study on a full-time basis. The study plan is published on the Faculty website. The average duration of a semester in full-time studies is 20 weeks (the scope of studies is 30 credits), of which 3 weeks are allocated for the examination session. The students' workload is evenly distributed: the duration of contact work in a week does not exceed 28 academic hours, and it does not exceed 8 academic hours in a day. The contact work and examination sessions take place according to a timetable approved by the Dean. Timetables are published no later than one week before the end of the semester or examination session on the Faculty website.

Classroom activities and self-study assignments are carefully planned for the semester by the subject teacher, and students account for them according to the plan, which is presented by the teacher during the first lecture of the semester. Assessment of the exam and project results is organised during a 3-week examination session. Following the agreement between the teacher and students, examination timetables of the full-time studies are set up by the Department Manager and approved by the Dean.

There are two forms of study organisation: contact work and students' self-study work. The subject implementation form is indicated in the subject description. The study plan provides self-study work hours for each study subject. The teacher assigns tasks for the independent work and chooses methods to assess the assignment. When starting a new subject, students are introduced to the consistency of the subject studies, links between theoretical, practical and independent work, the amount of time that they have to perform the task, as well as assessment criteria. Databases subscribed by VK are used to search for information.

Independent tasks develop students' ability to find, systematise and summarise science-based information, improve public speaking and presentation skills, reveal the links between science and studies.

The assessment of the independent student's task highlights such aspects such as time planning, adequacy and scientific validity of information sources, analytical skills, public speaking, information retrieval and summarisation skills. Assessment of self-study work is a part of cumulative assessment of the study subject.

The main study methods used by the teaching staff are: interactive lecture, discussion, group work, practical work, situation analysis, information search, individual consultations, projects, etc. Study methods are indicated in the subject description. With the introduction of distance learning on the Covid-19 pandemic, new interactive study methods were introduced - a variety of video lecture products using virtual environments.

The principles and procedure of the evaluation of learning outcomes at VK are regulated by the Description of the Procedure for Assessment of Learning Outcomes (https://www.viko.lt/media/uploads/sites/3/2014/07/Studiju\_pasiek\_vert\_tvarka\_2020-05-13\_galutinis.pdf). When assessing students' learning outcomes, the following principles are followed: relevance and validity, reliability, involvement. Ten grade assessment is applied for the evaluation of student's achievements. The assessment methods used to evaluate student's achievements are provided in the subject description. Subject studies are completed with an examination or student's independent work (project, practice report). In order to ensure the continuous work of students throughout the study semester, VK applies cumulative and criterion-based assessment, the structure and criteria of which are defined in the subject description. The student's self-study tasks influence the study process and its quality, therefore, depending on the learning outcomes of the subject, a different amount of assessment methods is available: personal progress during the semester, active participation in practical classes and demonstrating the performed independent work tasks, presentation, etc.

Graduates can choose their second cycle studies in higher education institutions of other countries: *HAMK University of Applied Sciences* in Finland, *Corvinus University* in Hungary, *Slovak University in Nitra*, Slovakia and other. Also, after one year of practical work experience in this field (or after bridging studies), graduates can apply for a Master's degree in related fields at Vilnius University.

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

During the period under review, we did not have any students with special needs or from socially vulnerable groups. If the need arises, these students would be given the opportunity to study according to an individual study plan. The Faculty building (at 39A Studentų Street and 2 Dvaro Street) is adapted for students with special needs. Socially vulnerable groups (orphans, the disabled, students from large families and low-income families) may be subject to a deferral of tuition fees or payment in instalments, as well as 50-25 per cent reduced dormitory tax.

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

Monitoring of student study progress is carried out in several stages:

The student is personally responsible for monitoring the progress of his studies. Every student gets access to the Academic Information System (hereinafter AIS) at the beginning of their studies and is constantly encouraged to monitor his progress in this system.

Heads of departments, study programme coordinators and subject teachers periodically (every month) inform the Head of the Study Department about students who did not come to the interim and final examination and did not submit the supporting document. The Head of the Study Department contacts the student (by e-mail or telephone) to identify the reasons for his absence, to motivate the student to cope with his works on time, to improve student progress. This helps to identify students who receive negative evaluation or are absent from examination without a justified reason. An evaluation is undertaken of the level of underachievement of each student who has received negative grades, and the link between monitoring of student study progress and the results of teaching quality assessment survey, which is periodically conducted at the Faculty. Potential trends are identified, and analysis of the situation is presented at the meetings of the Faculty Dean's Office and / or community meetings, where opportunities to reduce student underachievement are discussed.

At the end of the semester, the Study Department performs an analysis of students' progress, informs students about their study achievements for the purpose of preventing dropouts, makes a timetable for examination related to academic debts (indicting the date, time and venue). This timetable is compiled and published for both students and teachers not later than two weeks after the beginning of a new semester on the Faculty website, the link is sent by e-mail.

In order to improve the progress of students, the Heads of Departments / the Study Department staff constantly advise students on the choice of subjects, assessment, and other academic issues.

After evaluating the list of study subjects of the previous semester, where students have the largest number of academic debts, on the initiative of the Study Department, an individual timetable for additional consultations can be made.

Taking into account the unequal preparation of students for studies at VK, by the decision of the Faculty Dean's Office, a timetable for additional consultations for students may be concluded.

The subject teacher has to announce the evaluations within 5 working days, excluding the day of examination. Having announced the evaluations, the subject teacher, sets the time to familiarise students with main failures and mistakes made in their work.

At the end of the semester, the subject teacher gets acquainted with the results of the teaching quality assessment survey, which is periodically conducted at the Faculty, establishes the links between the applied student assessment model, student achievements and the level of student underachievement, and, if necessary, changes the student assessment model.

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

The monitoring of student study progress is regulated by the Study Procedure (https://www.viko.lt/media/uploads/sites/3/2014/07/VIKO\_Studiju\_tvarka\_su-pakeitimais\_2020-05-18.pdf) and Description of the Procedure for Assessment of Learning Outcomes (https://www.viko.lt/media/uploads/sites/3/2014/07/Studiju\_pasiek\_vert\_tvarka\_2020-05-13\_galutinis.pdf). The weighted average of student study progress within the Programme is 8.15 (Table 4.4.1).

	Student study progress		Number of underachieved students		
Year	Full-time studies	Part-time studies	Average	Full-time studies	Part-time studies
2017-2018	7.23	8.38	7.83	0	0
2018-2019	8.18	7.93	8.04	0	1
2019-2020	8.45	8.68	8.59	2	1

Table 4.4.1. Student study progress within the Programme

The monitoring of student study progress shows that the learning achievements have improved over the last three years, however, in 2019-2020, three students completed the spring semester with an academic debt. The reasons are very individual and are related to distance learning during the quarantine period. The results of the monitoring are used for the analysis of the causes and their elimination (discussions about the causes with the Head of the Department and the subject teacher). If a student is unable to complete the assignment on time, an individual timetable is created for him by mutual agreement.

Interim examination helps the student monitor his progress. After completing each individual task, the teacher outlines and discusses the results achieved by the student group (following the requirements of personal data protection). At the time specified by the teacher, a student individually gets acquainted with the comments and evaluation of the completed task. To provide feedback, VK uses the Moodle, MS TEAMS, AIS.

At the end of each semester, after the examination session, an analysis of student achievement monitoring is performed, and the interconnection with the teaching quality assessment results is checked.

At the end of the semester, a list of students with academic debts is compiled, and the subjects / modules where students have the highest number of academic debts are identified. The summarized results are presented at the Faculty Dean's Office, the Faculty Council, consequently, they are used to improve the study process and to plan student assistance. The Head of the Study Department / Head of the Department communicate with underachieving students, find out the reasons for their underachievement, suggest and organise solutions to the problems, e.g. additional consultations. The results of the monitoring are also used by teachers to plan measures to improve the subject and increase student progress. Students' complaints about the study process and teachers are being heard too. For example, students from the ZD17 group complained about the teacher of drawing; the teacher was informed, however, due to the lack of regard for the remarks, the teacher was replaced.

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

In order to ensure the employability of graduates and graduate career monitoring, under the current Description of the Procedure for Improving Teaching Quality Through Feedback valid at VK, every year the Department conducts surveys of graduates about the Programme, acquired competences and the setting into the labour market 6 months after graduation. The survey aims to find out whether 6 months after graduation, graduates work, whether the nature of the work is related to the study programme they have completed, how quickly they managed to get a job, what difficulties they encountered. Graduates evaluate the applicability of the knowledge and skills acquired during their studies in the labour market, as well as provide feedback to the Faculty on how the study programme and the quality of studies could be improved.

Surveys are conducted through a direct survey service. Links are sent to students by email and they are asked to complete the surveys. The results of the surveys are published on the Faculty webpage.

The career monitoring of graduates of the Programme is carried out every year on the basis of the data of the Employment Service (until 1 October 2018, the Lithuanian Labour Exchange) under the Ministry of Social Security and Labour of the Republic of Lithuania, Career Management Information System (KVIS, Sodra). According to the data of the Employment Service under the Ministry of Social Security and Labour on 1 June 2017, 2018 and 2019, graduate employment rates before the pandemic were high enough (90-100 per cent respectively).

The Karjera.lt platform allows monitoring the employability of the graduates of Landscape Design study programme according to the completed study programme and salary indicators.

The VK Career Centre and faculties organize career management skills training seminars, meetings with employers, lectures, practical professional activities, tours to companies to familiarize with real working conditions. Students have the opportunity to apply theoretical knowledge, get to know themselves, assess their strengths and weaknesses, develop a career vision, personal job search strategies, develop learning and other skills. By developing career management skills, graduates learn to respond appropriately to changes in the labour market. The Career Centre provides individual career consultations regarding a CV, job or practice place search, self-introduction during the job interview, etc. Access to the Career Management Information System, allows students and graduates (the latter can use the system for another 5 years after graduation) independently use career planning tools, to perform tests to explore Interests, Talents, Career Values, Career Management Situations and Career Management Competences, monitor personal changes (tests can be repeated every 6 months and their indicators are compared with the average results of higher education students in Lithuania), create a personal career plan, provide information about themselves to the potential employer, learn meaningful practical advice, take advantage of job offers and practice placement opportunities.

The employability indicators of the graduates of Landscape Design study programme are presented in Table 4.5.1.

Graduation period up to	Number of graduates	Number of graduates registered with the Employment Service after 12 months	Employment rate, per cent
1 July 2017	17	0	100.00
1 July 2018	10	1	90.00
1 July 2019	13	6	53.85

Table 4.5.1. Employability of the Programme graduates in 2017–2019

The analysis of the graduate employability shows that in 2020 the number of graduates registered with the Employment Service increased. This period is associated with compulsory quarantine, the post-quarantine period, and with rising unemployment. The increase in the number of registrants was influenced by revised operational perspectives by employers and optimized functions, as well as the size of the workforce resulting in redundancy.

The restructuring process of business activity is also indicated by the information received by the Employment Service on redundancies: in the first nine months of 2020, there were twice as many notifications of planned redundancies among employees as in the same period last year. The possibility to receive job search allowances also encourages residents to register (as a result, more people who are inactive in the labour market, become clients of the Employment Service). Also, due to the economic situation, some self-employed people did not resume their activities. They became clients of the Employment Service.

In order to improve the quality of studies and the professional preparation of graduates, surveys of graduates and employers are conducted annually, in which they can express their opinion on the professional preparation and acquired competences. Summarizing the data of the survey of 2017–2020, it appears that the study Programme is evaluated as good by the graduates. Preparation

for future professional activities according to the acquired qualifications they also evaluate as good. Summarizing the results of the 2017–2020 survey, it can also be stated that companies / institutions / organizations positively evaluate the readiness of Landscape Design students for professional activities.

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

The main document regulating academic integrity in VK is the Code of Academic Ethics (https://www.viko.lt/media/uploads/sites/3/2014/07/Akademines-etikos-kodeksas-EN-AT-1.pdf). Academic ethics is supervised by the Committee of Academic Ethics. Every student gets acquainted with and signs the *Declaration of Academic Honesty*, in which the student declares on his honour to comply with the provisions of the VK Code of Academic Ethics. Provisions of tolerance and non-discrimination are also established in the Study Procedure (https://www.viko.lt/studijos/studiju-dokumentai/vilniaus-kolegijos-studiju-tvarka/): students have the right to freely express their thoughts and views; to receive social and material support in accordance with the established procedure; to complete the assignments in alternative ways if he / she has a disability.

Annual student surveys are conducted to assess the effectiveness of policies to ensure academic integrity, tolerance, and non-discrimination. There have been no cases of academic dishonesty among Landscape Design students over the past three years.

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

A document for setting down the procedure for submission and examination of appeals is the Regulations on Appeals of Vilniaus Kolegija / University of Applied Sciences. According to this document, a student may submit an appeal regarding the assessment of the interim and / or final examination of the subject, the assessment procedure, the assessment procedure of the final work, crediting of learning outcomes, assessment and recognition of learning outcomes acquired in non-formal adult education institution. The appeal must be reasoned and submitted in writing within a specified time. Depending on the nature of the appeal, it is submitted to the Dean of the Faculty or the Rector of VK. Upon receipt of the appeal, a 5-member Board of Appeal is formed to examine it. The decision of the Board is final and not subject to appeal. There have been no appeals or complaints about the study process in the Landscape Design study programme over the past three years.

Expert recommendations provided during the last external evaluation related to				
	Studying, student performance and graduate employment			
1.	1.RecommendationActions taken by the HEIComments			
	None			

### **Please provide main results of the self-evaluation in the area of** *Studying, student performance and graduate employment*

### **Strengths**

Consistent systematization and periodic analysis of data about students and their studies.

### Areas for improvement

To increase the participation of employers and graduates in feedback surveys.

### 5. Teaching staff

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

The list of the teaching staff within the Landscape Design study programme in the field of environmental engineering is provided in Annex 6. The Programme is implemented by 13 teachers working in the institution on a permanent basis. 6 teachers of the field subjects are working 0.5 of a full-time post and have been teaching for at least three years, which is 60 per cent of all teaching staff within the field study programme. 4 teachers permanently employed by the institution, and working less than 0.5 of a full-time post, account for 40 per cent. 3 teachers, constantly working in the institution and having less than 0.5 of a full-time post in the analysed field, teach general subjects. Annex 7 presents a list of teaching staff within the field study programme, and indicates their academic title and / or science degree, pedagogical work experience, areas of scientific interests (indicating three most significant works prepared during the last 5 years), practical work experience in the field of the taught subject, the subjects taught, and the current workload in the higher educational institution. The relatively small number of teachers in the field was caused by the decrease in the number of students and the optimization of the study process. Further analysis of the academic staff provides data only on the teachers teaching the subjects of the field.

Each academic year, an average of 18 students are admitted to the field studies. From 2020 the admission is limited to a full-time mode of studies, giving the opportunity to choose between full-time studies and full-time studies organised in sessions. On 1 October 2020, there were 65 students studying the Programme, including 19 first-year students. The ratio of the number of teaching staff within the field study programme to the number of students is 7.

Depending on the academic rank and science degree, the field subjects are taught by five (50%) Associate Professors Doctors of Sciences and 5 lecturers (50%), one of whom is studying for a doctorate. This is in line with the formal requirements for the implementation of study programmes, which state that at least 10 per cent of the study field subjects are taught by teaching staff with a PhD. The average length of service of teachers of the field subjects is 22.4 years, and the average practical experience in the field of the subject taught is 12.4 years.

The core of the teaching staff consists of teachers who have accumulated extensive pedagogical experience, which is directly related to their pedagogical excellence, i.e. the ability to communicate and cooperate with students and colleagues, combine students' expectations with the outcomes of the Programme, apply flexible study methods to students of different talents, select appropriate subject information, create methodological material. The high scientific potential of the teaching staff within the field study programme allows for an active participation in applied research and experimental development. Teachers are active in project activities, preparing and implementing national and international projects. Detailed information on the scientific activities of teaching staff within the field study programme is provided in Annex 7.

In order to diversify the studies, teachers-practitioners are invited to give lectures. Integrative lectures are intensively conducted. During these lectures, practical experience is shared by alumni and social partners, such as: Inga Gaidelytė-Markevičienė (member of the Lithuanian Arborist Association - LARA), Ignas Gylys (UAB *IDG Service*), Raimonda Šimėnaitė (Vilnius University Botanical Garden), Renata Mikailionytė (UAB *Sodo botanika*), Eglė Visockė and Audrius Sakalauskas (UAB *Stebulė*), Gintarė (Landscape Designer), Kazimieras Kazlauskas (UAB *Herbela*), Rita Bieliauskaitė-Bareikienė (UAB *Inrita*). Tomas Čižokas, the Head of the VK *VikoFlora*, coordinates the performance of practical work in the educational nursery. Practices carried out in companies are led by Practice Supervisors appointed by the companies. It is planned to continue to involve as many teachers-practitioners as possible (sustainable development manager of real estate projects from *Citus Group*, construction engineer-expert from *Kiwa Group*) to give lectures. By inviting lecturers from the business environment and other institutions, accurate information on changes in the structure of the labour market, content of professions, the needs, ways of acquiring professions and qualifications, career opportunities is exchanged. By presenting specific cases and sharing examples from their practical experience, teachers bring students closer to the real business

world, helping them to find solutions to specific problems. This process takes place systematically and enriches diversity in studies.

Teachers of the field subjects are members of national societies, associations or their leaders, such as the Lithuanian Union of Dendrologists, Lithuanian Union of Florists, Lithuanian Association of Herbology, Social Club of Vegetation Learning and Protection "Medumėlė", Lithuanian Union of Landscape Architects, Agricultural Council of the Republic of Lithuania, international organization - ECLAS (*European Council of Landscape Architecture Schools*).

Teachers of the field subjects also organise and deliver training courses, seminars, creative workshops, give public lectures, participate in radio programmes, etc. During the analysed period 2019/2020, 14 articles were published in popular science publications, 7 public lectures were given, 4 ornamental plant fairs were organised; during the period 2018–2019, 13 articles were published in popular science publications, 24 public lectures were given, 2 ornamental plant fairs were organised, 2 times teachers participated in radio programmes; during the period 2017-2018, 4 articles were published in popular science publications, 22 public lectures were given, 4 ornamental plant fairs were organised, events (Dr. N. Liepiene, Dr. D. Ryliškis, Dr. O. Motiejūnaitė, Dr. G. Palaitytė, Dr. R. Kondratienė).

Depending on the requirements for the position of a teacher, the development of teachers' competences is multifaceted. In the preceding paragraphs of the Self-Evaluation Report the high competence of the teaching staff was mentioned, and we can state that a considerable number of teachers deepen their competences by conducting applied research, writing articles, monographs, preparing and delivering presentations and giving public lectures.

The scope of teachers' work is measured by posts. One full-time post is 1,520 hours per academic year. The teacher's contact work with students comprises 760 hours. Other hours are intended for the research and development activities, projects, organizational and methodological activities and improvement of competences.

Over the last three years, the number of teachers within the field study programme has been stable. A stable team of teachers working in the Programme ensured active monitoring of the Programme and effective feedback, which plays an important role in achieving learning outcomes of the Programme. The average age of teachers working in the field of study is 52.8 years, and the age of academic staff ranges from 44 to 61 years. With sufficiently stable groups of middle-aged teachers and a declining number of students, to recruit teaching staff and ensure turnover is a challenging task that will have to be addressed in the near future.

The VK teachers take up positions on a competitive basis, taking into account teachers' basic education and its correspondence to the subject taught, practical work experience, science degree and academic title.

The recruitment procedure for teachers is regulated by the *Description of the Procedure for Organisation of Competitions for the Positions* of *Teachers and Teaching Procedure* declared by the Rector of VK, Order No V-94 of 1 March 2019 (<u>https://www.viko.lt/media/uploads/sites/3/2014/07/</u> *Konkursu\_atestacijos\_tvarka\_2019-1.pdf*).

Description of the VK Teachers' Positions approved by Order No V-36 of the Rector of VK of 1 March 2019, Rules of Procedure approved by the VK Board meeting minutes resolution No STN-6 in 2018, (https://www.viko.lt/kolegija/veiklos-dokumentai/darbo-tvarkos-taisyklos/) and the Teachers' Admission and Dismissal Procedures Description approved by Order No V-204 of the Rector of VK of 31 August 2018.

Teachers can be hired under a fixed-term employment contract of up to 2 years or through a competition for a 5-year term. The academic staff of the Programme is formed by the Head of the Department, and the candidatures are presented to the Dean of the Faculty. Each year, the composition of the Department is approved by the Rector of VK on the recommendation of the Dean of the Faculty.

The personnel policy of the Faculty teaching staff is formed to conform with the requirements of the normative documents. The basic requirements, which are provided in the Regulations on the *General Studies Execution Requirements*, are met by all teachers, i.e. teachers hold a Master's degree, have at least 3 years of work experience, 50 per cent (compulsory -10 per cent) of the total scope of college study field subjects is taught by researchers.

The academic activities of the VK teachers are evaluated every year. This helps to ensure the systematic development of competences. In accordance with the *Description of the Procedure for* 

*Preparation and Approval of the VK Teachers' Performance Report* published by VK Order No V-95 of 1 March 2019, by 15 June each year, teachers submit a teacher's performance report, in which they report on the activities performed during the academic year that were planned and recorded in the *Tenured Teacher's Workload Statement*. It helps to assess the qualification of teachers in order to achieve the aims of the Programme, provides an opportunity to participate in a public competition for the position of a teacher for the next five-year term. The attestation and competition of teachers is announced by the Rector of VK, and they are organized and carried out by the Competition and Attestation Commission. A contract of employment of indefinite duration is concluded with a person who has won a competition for the same position as a teacher or researcher for the second time in a row. This person is certified every 5 years in accordance with the procedure established by the Academic Council. A non-certified person is dismissed from the current post.

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

The internationality of the study process is one of the indicators of the quality of studies provided by the institution. The goal of the VK Integrated Development Strategy until 2020, is to develop the internationality of VK. To achieve this objective, the Faculty developed academic mobility for students and teaching staff. The implementation of the goal remains relevant in the VK Strategy for 2021-2025.

VK has developed a system for implementing the academic mobility of teachers. One of the main programmes promoting internationalization is the Erasmus + programme. Teachers are encouraged to participate in the two basic Erasmus + mobility activities: teacher mobility for teaching, teacher mobility for learning.

The competition for the selection of teachers for teaching mobility is announced publicly on 1-30 September of each academic year, and all VK teachers are invited to participate. (https://www.viko.lt/tarptautiniai-rysiai/destytoju-mobilumas/#destytojumobilumas). The competition for teacher mobility for learning takes place throughout the academic year. Bilateral agreements are concluded with foreign higher education institutions of the Programme countries and partner countries for the implementation of teacher mobility visits. The environmental engineering field Programme has 18 foreign partners for the implementation of mobility activities. In accordance with the *Recommendations for Strategic Partnership*, the Department strengthens cooperation with strategic partners such as *Latvia University of Life Sciences and Technologies, Anhalt University of Applied Sciences in Germany, Banat University of Agricultural Sciences and Veterinary Medicine in Romania*, etc. In addition to teaching visits, joint projects of teachers and students are also being developed.

Teachers plan the development of their competences, plan and find an internship place abroad, prepare and coordinate an internship programme. Adequate support is given for teachers' teaching and learning visits, it is allowed to choose the time of the visit, teaching or learning activities abroad are included in the scope of their non-contact workload. Following the visit, dissemination of good practice to teachers and students at the Department and Faculty is recommended, as well as promotion of mobility activities. The list of the teaching staff of the environmental engineering field who taught abroad in 2017–2019 is presented in Annex 9.

In the 2017–2018 academic year, teachers in the field of environmental engineering had 2 teaching visits in Germany and Poland, 2 learning visits in Belgium, at the University of Ghent. 50 per cent of teachers in the field of environmental engineering participated in mobility activities.

In the 2018–2019 academic year, the international mobility of teachers increased, and mobility activities in foreign higher education institutions and companies were implemented by 100 per cent of teachers of the field. 3 teaching visits to Polish and Latvian higher education institutions and 3 learning visits to the Norwegian University of Environmental and Life Sciences and a German company were implemented.

Mobility visits were attended by all teachers in the field of environmental engineering who wished to teach or improve competences in foreign universities or companies.

In the 2019–2020 academic year, 67 per cent of the teachers of the field had planned teaching visits, which they intended to implement in March-June of 2020, however, due to the COVID-19 pandemic and national quarantine, these activities could not be implemented. For the same reason, it

was not possible to continue the project activities with the Romanian higher education institution. These activities have partly moved to the virtual space, maintaining contacts with foreign higher education partners.

Foreign teachers usually come to the Faculty during an international teaching week or an international study week, which is organized at the same time in all faculties of VK. In this way, a larger number of teachers is attracted, which make it possible for the VK teachers to communicate and exchange contacts with foreign teachers visiting other faculties, to offer a richer programme of the event and to attract more participants. In 2017–2018, four foreign lecturers gave lectures to students of Landscape Design, in 2018–2019, three foreign lecturers came for teaching visits. In 2019-2020, the number of incoming teachers increased. In 2020, two lecturers participated in the international teaching and learning weeks. Another four lecturers cancelled their visits due to the impending pandemic. Data on the incoming foreign lecturers to the Faculty in 2017–2020 are presented in Annex10.

#### 5.3. Evaluation of the conditions to improve the competences of the teaching staff

The goals of the VK strategy emphasize the possibility for teachers to continuously pursue professional careers and personal development as a priority area. In 2018, after conducting a survey of the VK faculties and administrative staff on the issues of competence development, an action plan for the development of the competences of the academic and administrative staff was prepared. According to this plan, starting with February 2019, the VK administration has centrally organised didactic, distance learning and researcher competence development events. Payment for teachers leaving for further-training events is done in accordance with the procedure for the VK staff member travelling on official duty. Each academic year, VK draws up an internal training plan, and everyone may participate in it. Internal training enables more efficient use of funds for professional development. Teachers are offered computer literacy trainings, Moodle, AIS, ELAB systems trainings, etc.

When planning the annual budget of the institution, funds are provided for the improvement of teachers' competences. In May-June, a teacher, in coordination with the Head of the Department, plans the next year's professional development in scientific, didactic or professional fields. The need for specific courses and seminars for the next academic year is determined taking into account the aims of VK and the Faculty, compliance with normative documents, coordinated and planned at the Department.

The principles, goals, tasks, methods and forms of professional development are described in the Description of the Procedure for Improving the Competences of the VK Staff, approved by Resolution No ATN-9 of the VK Academic Council of 18 December 2020. The description regulates the goal of competence development, tasks, groups, principles, methods, forms and types, procedures for planning, organizing and crediting competence development of all employees of VK, both academic and non-academic staff.

Teachers of the field systematically and regularly improve didactic, professional and general competences. In 2017–2018, the duration of teacher professional development amounted to more than 712 hours. In 2018–2019, this number increased to 804.5 hours. In 2019-2020, the number of hours decreased slightly to 680 hours (Annex 11). The active participation of teachers in professional development events shows that academic excellence is one of the most important professional values for teachers.

In response to the COVID-19 pandemic in spring 2020, when restrictions on contact events reduced opportunities to develop competences "live", the VK administration provided its employees with a distance competency development tool - a 12-month VIP membership in the distance learning platform egu.lt, which allows free and unlimited access to the trainings throughout the membership period. The VK staff also improved their competences in other distance learning platforms: Coursera, academia.edu., Smis.lt, udemy.com, entrepreneursokursai.lt, Liedm.nuotololiniai mokymai, pedagogas.lt, Project "Joined Lithuania" trainings (within the Operational Programme for EU Structural Funds Investments for 2014-2020), and other ways of informal education. Teachers are offered computer literacy trainings, Moodle, AIS, ELAB systems trainings, etc.

Teachers actively participate in national, regional and city events, competitions, sustainable cooperation projects, disseminate the latest achievements of science and practice, develop ecological self-awareness, promote sustainable consumption.

	<b>Expert recommendations provided during the last external evaluation related to</b> <i>Teaching staff</i>				
	Recommendation	Actions taken by the HEI	Comments		
1.	It is important to improve the international aspect of the Programme, to promote the mobility of students and teachers	VK became a member of the International Association European Council of Landscape Architecture Schools. Every year, teachers of the Programme participate in Erasmus + activities.			
2.	Increase the number of full- time teachers	Conducting one study programme in the field, there was no such possibility.			
З.	Ongoing communication between administrative staff and teaching staff should be gradually improved	More attention is paid to internal communication, taking into account the different needs of teachers. Dean's Office meetings are planned and carried out in the Department, as well as individual interviews with the teaching staff of the Department.			

### **Please provide main results of the self-evaluation in the area of** *Teaching staff*

#### Strengths

The subjects of the field are taught by practitioners with at least 3 years of professional work experience. This ensures the links between the subjects taught and the needs of the labour market. Teachers are active in the ERASMUS + mobility programme.

The VK internal resources are used to improve teachers' competences.

There is an optimal team of teaching practitioners and researchers.

Versatile and systematic qualification improvement of the teachers of the study field.

### Areas for improvement

To submit applications in the tenders announced by the Education Exchange Support Foundation to fund visits of highly qualified teachers from abroad.

Encourage teachers to become more involved in internships in companies, taking advantage of the opportunities offered by the Erasmus + programme.

### 6. Learning facilities and resources

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

Studies are carried out efficiently using the learning facilities and resources of VK, which are directly oriented to ensure the quality of studies in order to create the most favourable study conditions for students and teachers. The Faculty is equipped with lecture rooms, which are used for study purposes as required. The size of the rooms varies from 10 to 120 workplaces. The rooms for lectures are provided depending on the size of the student group and the number of workplaces in the lecture room.

Studies take place in premises equipped with the necessary equipment for studies, computers with Internet access, projectors, the necessary audio and video equipment. Students can use all lecture rooms for independent work. The size of computer classes varies from 12 to 30 workplaces.

General subjects of the Programme and theoretical lectures of some subjects of the field are conducted in the central building of the Faculty of Agrotechnologies, at 39 A Studentu Street, Vilnius. The total area of the Faculty is 1,978 m<sup>2</sup>. Teachers may make use of the equipped teachers' rooms (8 workstations).

Most of the theoretical and practical classes take place in one of the educational buildings of the Faculty, which is located at 1 Dvaro Street, Buivydiškės, Vilnius district (Field Laboratory). The total area of the field laboratory is 518.68 m<sup>2</sup>. It is equipped with four auditoriums-laboratories: agrobiology - 36.22 m<sup>2</sup>, computer programmes (AutoCAD 2020, Sketchup 2020, Adobe Photoshop, Relux, Lumion) - 53.67 m<sup>2</sup>, engineering graphics - 35.82 m<sup>2</sup>, design - 98.28 m<sup>2</sup>. The field laboratory is also equipped with 5 workstations for teachers. All lecture rooms are equipped with computer software Microsoft Windows 10 Pro, Microsoft Office Professional Plus 2019.

To perform practical work doing the subject of Measurement Technology for Engineering, a contract with Vilnius College of Technologies and Design (54 Antakalnio Street, Vilnius) has been concluded, according to which a geodesy laboratory with all the necessary equipment (theodolite, tachometer, levelling gauge, GPS receivers, etc.) is leased.

The instruments used for practical work and research in Applied Dendrology, Herbaceous Ornamental Plants, Flora of Lithuania, Technologies of Green Space Maintenance subjects are: digital microscope Smart 5 MDPRO, microscopes Biolight 200 and ConusClip, pocket microscopes, magnifying glasses, scales IMPERIAL, heated nurseries, weather station Deluxe, portable soil pH and temperature meter, peat - HI99121, NPK, pH measuring tests - H13896, etc.

Practical classes are carried out in the ornamental plant educational nursery (3 ha), which belongs to the Department of Landscape Management and Agribusiness Technology. Two modern greenhouses in the nursery allow students to have practical classes of Herbaceous Ornamental Plants and Applied Dendrology subjects. There are a few plant expositions: naturalistic flower garden, hedge exposition, climbing plant exposition. About 200 different names of herbaceous ornamental plants grow in the perennial flower gardens. The nursery exhibits more than 100 different names of ornamental woody plants. One of the most important expositions is a collection of rare and protected plants of Lithuanian flora. Currently, the collection contains about 35 different names of plants, which are included in the Lithuanian Red Data Book. An information system that is adapted for studies has been created in the collections of the educational nursery.

Practices of Applied Dendrology, as well as applied practices of Herbaceous Ornamental Plants and Green Spaces Maintenance Technology take place in the ornamental plant educational nursery. The equipment used in the nursery: cordless hedge trimmer STIHL HSA 86, cordless shrub shears STIHL HSA 26, cordless leaf blower STIHL BGA 45, cordless saw STIHL MSA 160T, cordless lawnmower STIHL FSA 85, electric shredder STIHL Gin 250S, sprayer Galax A 10, garden shears Single Step, petrol mower HUSQVARNA LC 153-HD, petrol mower, brush cutter HUSQVARNA 128R, petrol cultivator JONSERED, petrol saw HUSQVARNA 236, hand-operated garden tools with Quick Fit system, watering system with sprinklers, vertical garden with automatic watering and fertilizing system and others. In the ornamental plant educational nursery teachers also carry out educational activities, consultations, seminars, classes for students and community.

In 2017, an educational practical training centre *VikoFlora* intended for practical activities of the Landscape Design programme students, was established at the Faculty of Agrotechnologies. The activities of the centre are coordinated with the needs of the Programme. Students have the opportunity to participate in the activities pursued by VikoFlora such as: landscaping, maintenance of green areas, growing ornamental plants, etc. VikoFlora coordinates the activities of the ornamental plant educational nursery, the range of plants is constantly expanded, field experiments are conducted, observations are carried out, the development processes of ornamental plants, as well as the peculiarities of ornamental plant growth are analysed. The VikoFlora website publishes information about the undertaken activities and information, which is accessible through QR codes about available plants from the collection of rare and protected plants of the Lithuanian flora (viko.flora.viko.lt).

The Library is a division of VK directly related to the study process, the aim of this division is to ensure access to information resources necessary for studies and research and to develop users' information literacy. The Library Fund involves more than 172 thousand units / 50 thousand titles of printed publications (2020). Every year, about 110 thousand Euro are allocated to ensure the activities of the Library (17 Euro per 1 student). During the year, the Library acquires about 2.9 thousand of new publications, 44 per cent of which are published by foreign publishing houses and receive the largest share of funds - on average 70 per cent. Every year, the Library subscribes to about 120 titles of periodicals, 50 per cent in foreign languages (80 per cent of funds), some periodicals are electronic (18 per cent).

The area of the Library is  $435.27 \text{ m}^2$ , the reading rooms have 46 workplaces and 9 of them are computerized. The Library of the Faculty accumulates a fund of publications relevant to the study programmes conducted in the Faculty; in total there are 25,919 units / 8, 977 titles of publications, 25 per cent of which are intended for the field studies. Every year the Library Fund is updated with relevant publications. In 2017-2020 the Library purchased 355 books (30 per cent in foreign languages) for general subjects of college studies and study field subjects, and subscribed to 6 professional periodicals (1 in a foreign language).

Course books and textbooks are lent to students for the semester, other books are lent according to students' needs: for a week, a month, with the possibility to extend the deadline. Students can search for books, order the necessary publications and extend the due date for returning a library book by logging in to the VK virtual library.

The Library offers its users a variety of electronic resources: books, periodicals, international databases. In total, in subscribed databases, the VK users have access to 204 thousand of book titles, 17 thousand of magazine titles and 90 thousand of titles of other resources.

In 2017-2020, the Library subscribed to electronic book collections of 5 publishing houses of Lithuanian universities (1,255 books) and offered open access electronic books of the universities. In these collections, students were able to read books required for general college study subjects (Mathematics, Communication, Research Methodology, etc.) and study field subjects (Landscape Architecture and Management, Architectural Graphics, Plants, Business Management and Economics, Environmental Protection).

In 2017-2020, the VK Library has subscribed to 16 international databases, 7 of which are suitable for the Programme: EBSCO*host (GreenFILE, Academic Search Complete, Business Source Complete, OpenDissertations), EBSCO eBook Academic Collection, Emerald Management eJournals Collection, Taylor & Francis.* 

In the *Taylor & Francis* database, students can read scientific articles on subject topics in the study field: (architecture of green spaces, landscape architecture, cultivations and maintenance of plants, small greenery, soil science, business management, etc.), e.g. magazines *Studies in the History of Gardens & Designed Landscapes, Landscape Research, Journal of Landscape Architecture, Journal of the American Planning Association, Planning of Perspectives, Journal of Urban Design, Communications in Soil Science and Plant Analysis, Soil Science and Plant Nutrition*, etc.

In the *Emerald* database, students can find articles on ecology, sustainability, green architecture, business topics, e.g. magazines Journal of Place Management and Development, Property Management, International Journal of Climate Change Strategies and Management, Ecofeminism and Climate Change, etc.

The *EBSCO eBook Academic Collection* database contains 346 books related to the study field topics (landscape architecture, design, parks, plants, etc.), 18,705 books on business matters and economics.

The *EBSCOhost* (GreenFILE, Academic Search Complete, Business Source Complete) contains thousands of scholarly (peer reviewed) journals, trade publications and magazine articles related to the study topics of the Programme, e.g. magazines *Journal, Landscapes/Paysages, Journal of Urban Planning & Developmen, Environmental & Experimental Biology, Journal of Environmental Planning & Management, Architectural Digest.* In the OpenDissertations database, through EBSCOhost, students can read a variety of dissertations relating topics of the field (e.g. parks and gardens, landscape design, plants, landscaping, etc.) submitted by 275 universities around the world, including Harvard, Oxford, Cambridge and many other European and US universities.

The Library also selects various open access databases, compiles thematic lists according to the study programmes of the faculties, activates open access resources in the VK Virtual Library. In the Virtual Library, users also have access to Lithuanian open access scientific publications and the Lithuanian Standards database (52 thousand of standards).

The Library actively contributes to the development of users' information literacy: developed a citation methodology for information sources according to the APA citation style; constantly disseminates electronic resources; conducts live and distance learning, and provides individual consultations on library services, information retrieval and citation.

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

The process of planning and upgrading the resources needed for the implementation of field studies are carried out periodically, taking into account the changing needs of students, teaching staff and the State funding. From 2019 the study facilities needed for the implementation of the Programme have been upgraded from the funds allocated to VK by the Ministry of Education, Science and Sports for R&D activities.

Each year, the Faculty plans to acquire study facilities according to the financial capacities, which depend on the number of students and the income from the activities (consulting, applied research, project activities, rental of premises, etc.) The teaching staff of the Department of Landscape Management and Agribusiness Technology submits proposals for the acquisition of the necessary facilities on an annual basis, and the priorities of the proposals are sharpened by the Department, taking into account the needs of teachers and students.

	Expert recommendations provided during the last external evaluation related to				
	Learning facilities and resources				
	Recommendation	Actions taken by the HEI	Comments		
1.	Fix flaws of the tools used in Garden Engineering and Maintenance practice	Purchased: cordless hedge trimmer STIHL HSA 86, cordless hedge trimmer STIHL HSA 26, cordless leaf blower STIHL BGA 45, cordless saw STIHL MSA 160T, cordless lawnmower STIHL FSA 85, STIHL cordless trimmers with telescopic handle, hedge trimmer STIHL HLA 85, electric shredder STIHL GHE 250S, sprayer Galax A 10, garden shears with folding blade Single Step, vertical garden with automatic watering and fertilizing system, etc.			
2.	A successful project "Modernization of Practical Training and Research Facilities in the Landscape Management Study Field" should be continued.	We have submitted the Erasmus + project "Innovative Rain Gardens' Methodologies in Training of Environmental Design Specialists" and other projects for infrastructure modernization. Every year, financing from Research and Development Funding is provided for the purchase of the necessary equipment (e.g. LED Grow Light Bar for plant growing, etc.)			

**Please provide main results of the self-evaluation in the area of** *Learning facilities and resources* 

#### **Strengths**

In order to achieve the aims and outcomes of the Programme, a sufficient base of learning facilities and resources has been created; it provides professional opportunities to organize theoretical lectures, practical work and practices, and to complete final theses by preparing quality projects. Methodological resources in the VK Library and access to electronic publications are sufficient.

#### Areas for improvement

The speed of Internet connection with the growing need for the use of digital technologies. Systematic equipment upgrade.

Quarantine announced in the context of the Covid-19 pandemic revealed the need to upgrade the tools for distance teaching / learning platforms.

### 7. Study quality management and publicity

#### 7.1. Evaluation of the effectiveness of the internal quality assurance system of the studies

The internal quality assurance system of the studies has been developed in accordance with the *Law on Science and Studies of the Republic of Lithuania, the European Higher Education Area Quality Assurance Regulations and Guidelines, the European Higher Education Quality Assurance Register, the Bologna Process and other documents supporting European Union's higher education. The internal quality assurance system of the studies is based on orders of the Minister of Education, Science and Sports of the Republic of Lithuania, the orders and regulations of VK, and the regulations of the Lithuanian Centre for Quality Assessment in Higher Education (SKVC).* 

The internal quality management system of the studies involves all stakeholders: the administrative and academic staff of the institution, students, graduates, employers, professional associations and trade unions, representatives of public institutions, etc. In accordance with the long-term strategic planning document approved in 2012, the *Integrated Development Strategy of VK until 2020* (https://www.viko.lt/media/uploads/sites/3/2014/07/Strategija-iki-2020.pdf), a permanent monitoring and publicity system has been created. The internal quality assurance mechanism of the studies is based on a regularly updated quality management model. As the provisions of normative documents change, internal documents are constantly updated. On 18 November 2020, a new document of the internal quality assurance of VK study fields was adopted, and approved by the Resolution No ATN-7 of the Academic Council.

VK has a document management system called Kontora, which stores orders, legal acts and other documents of the Rector of VK and the Deans. All study-related information: subject / module descriptions, student achievement assessments, etc., is provided in the Academic Information System (AIS).

The requirements relating to quality assurance of the studies are fulfilled in accordance with the following documents of VK: *The Statute of VK, Procedure of Studies at VK, Descriptions of Study Programmes, Description of the Internal Quality Assurance of Study Fields at VK, VK Code of Academic Ethics, Description of the Procedure for Crediting Learning Outcomes, VK Appeals Regulations, Description of Qualification Requirements for Teacher Positions at VK (http://www.viko.lt/studijos/studiju-dokumentai/;https://www.viko.lt/studijos/studiju-rganizavimas). These documents and the VK Quality Manual, Strategic Development Plans and Reports define decision-making and approval procedures.* 

In order to ensure effective and clear assessment of students' achievements, the planned assessment procedures are detailed in the *Procedure of Studies at VK*, *Description of the Procedure for Assessment of Learning Achievements* and *VK Appeals Regulations*. The documents are available on the VK website.

The following areas of activity are assessed on an annual basis: *management, studies and achievements, human resources, applied research, material and financial resources, international mobility, participation in national and international projects, professional development and organizational activities.* Annual plans are drawn up having regard to strengths, weaknesses and planned improvement measures. The implementation of the plan is monitored each year.

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

The internal quality assurance system of the studies is focused on students, therefore, they are involved in most of the quality management processes. Students participate in regular surveys, meet with the Programme coordinator at least twice a semester, and at least once with the Faculty administration to discuss issues concerning the quality of studies and receive feedback. Students are responsible for the quality of learning and academic achievement. Students' participation in the Programme management is broadly in line with their commitment to "study" and "participate in practical activities". In all cases, respondents receive feedback after the survey and after measurers are taken. The progress of student satisfaction with the quality of studies and the effectiveness of the applied measures are monitored every year.

The Study Programme Committee, which is responsible for the quality assurance of the Programme, consists of seven persons. The responsibilities of the members of the Committee are defined in the Study Procedure at VK and the Regulations of the Study Programme Committee. In order to ensure the change and quality of the Programme, the Committee meets at least once a year (usually at the beginning of the spring semester). The Chair of the Committee plans and organizes the activities, supervises the learning facilities and resources of the field / Programme, personnel recruitment and improvement of professional qualifications of the staff. One of the members of the Studies, organization of the study process and assessment, as well as expectations.

Representatives of the social partners support the introduction of innovations, that meet the needs of employers, into the Programme (e.g. company representatives are invited to teach certain topics of the subject), and identification of the need for specialists. Members - teachers supervise the academic content of the subjects, compliance of the subject learning outcomes with assessment criteria, applied research activities, mobility of students and teachers, relations with social partners.

In order to ensure effective feedback, the decisions of the Committee are discussed at the meeting of the Department (reflection for teachers) and the implementation of changes and dissemination of information to interested bodies are initiated, responsible people are appointed, and if necessary, working groups are set up.

Maintaining the purposeful direction of applied research, the Department initiates a group or groups of researchers for the development of applied research in accordance with the proposals made by the Committee. The Department submits proposals to the Faculty administration regarding the improvement of teachers' qualification and renewal of material resources. Having evaluated the proposals of the Department, the administration of the Faculty plans the funds, which are reflected in the estimates.

The subject teacher, who is responsible for the coherence between the Programme and learning outcomes, content, learning and study methods, indicates the changes made in the description of the subject in the annual Teacher Performance Report. The Performance Report of the Department, which is formed on the basis of teachers' reports, reflects the improvement of the Programme and its coordination with the priorities of the State and the region in various fields and international documents regulating the professional training of a specialist. The Department obliges teachers to adjust the learning outcomes and content of study subjects.

In order to improve the Programme, on the initiative of the Study Programme Committee, surveys of employers, graduates, teachers and students are conducted every year, during which the Programme and its compliance with the needs of the labour market are evaluated. All students of the Programme and all teachers receive an invitation to fill in an anonymous questionnaire once a year. Round table discussions with students, teachers and administrative staff are organized according to need. The summarized results of the surveys are published on the VK website, at the meetings of the Faculty Council and the Department. Employers, who contribute to the improvement of the Programme, are selected on the basis of how actively they provide opportunities for students to perform professional practices, involvement in the activities of the Study Programme Committee, and the process of peer-reviewing and defending final theses.

After approving the new regulatory documents and taking into account the results of the stakeholders' surveys, the learning outcomes of the Landscape Design Programme in the field of environmental engineering, as well as its study subjects, their content, scope and place in the study plan are reviewed and adjusted.

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

The websites of the Ministry of Education and Sports of the Republic of Lithuania and the VK contain information about the Landscape Design Programme implemented in the field of environmental engineering (<u>https://www.viko.lt/studijos/studiju-programos/krastovaizdzio-dizainas/</u>). The learning outcomes of the Programme, study subjects and their arrangement in semesters, and the acquired qualification degree are indicated. Information on how the competitive score is formed, and for the convenience of entrants, a competitive score calculator is provided. Every year, a publication is being produced and distributed to gymnasium students during the career events

and when they attend the VK premises. The VK representatives also play a successful role in disseminating information about studies at VK during national events (e.g. annual exhibition "Studies", event "Studfestas", Higher Education Fair, etc.) and international events (study exhibitions in Poland (11/10/2011), Latvia (21/09/2019), Sakartvele (28-29/02/2020 and 22/02/2019 / 23), the United Kingdom (23/03/2019), China (18-20/10/2018), Ukraine (08-10/11/2018) and Belarus (17/02/2019)). Social networks share stakeholders' views on the Programme, career opportunities, and graduate success stories.

# 7.4. Evaluation of the opinion of the field students about the quality of the studies at the HEI

The internal quality assurance system of the studies is based on measuring the opinion of students, teachers, graduates, employers and other participants in the study process. The obtained data are used to improve the quality of the organization of the study process, study programmes, academic staff, infrastructure and administration of the VK activities

The survey "Opinion of the graduates of the Landscape Design Programme on the programme, acquired competencies and establishment in the labour market" (Annex 13) revealed that the quality of studies of the Programme students' (ZD17 and ZDI16 groups) is assessed as good. The professional training according to the acquired qualification was assessed as good too. The mentioned shortcomings due to insufficient quality of the equipment (outdated computers and poor condition of drafting desks) are no longer relevant, because 8 new computers have been purchased and drafting desks have been repaired.

The results of the survey were introduced to the teaching staff of the Programme, as teachers are encouraged to update the content of the taught subject every year, as well as to improve the quality of studies. The results of the surveys are published on the VK website.

	Expert recommendations provided during the last external evaluation related to			
	Study quality management and publicity			
1.	I.RecommendationActions taken by the HEIComments			
	none	-	-	

### **Please provide main results of the self-evaluation in the area of** *Study quality management and publicity*

#### Strengths

The internal quality assurance system of the study field is efficient and functional. Monitoring is carried out systematically. The internal quality assurance system of the studies is student-oriented, and students are involved in quality management processes.

Improvement of the quality of the field studies is based on the feedback from students, society and labour market stakeholders.

### Areas for improvement

To develop cooperation with employers, representatives of professional associations, unions, public institutions and other areas in order to increase their involvement in the study quality management. Updating of the content of subjects on the basis of the recent scientific and technological achievements and changes in the labour market, is a permanent process.