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#### Translation from Lithuanian

# DIGITALISATION PROGRAMME OF VILNIUS UNIVERSITY OF APPLIED SCIENCES FOR 2022-2025

## SECTION I GENERAL PROVISIONS

- 1. The Digitalisation Programme (the Programme) of Vilnius University of Applied Sciences (the University) for 2022-2025 sets out the aim, objectives, directions, coordination and implementation of digitalisation in order to improve the quality of services and the impact on the region.
- 2. The Programme aims to develop digitalisation as one of the University's strategic horizontal priorities, to implement the other three strategic priorities, i.e. social responsibility, strategic partnership and internationalisation, to ensure the education of graduates who meet the needs of the labour market, to carry out applied research, experimental development, artistic activities, to organise international academic mobility, and to engage in the implementation of the region's strategic plans and programmes.
- 3. The Programme aims to enable the University community to develop effectively and to use safely innovative products and services, to strengthen the capacity of staff to apply new technologies and to enable the University to respond to rapid technological change. The Programme includes activities related to the creation and/or development of information systems or registers or the development of specific e-services.
  - 4. Concepts used in the Programme:
- 4.1. Digitalisation is making a system digital, using electronic processes, applying information technology.
  - 4.2. Digitisation is making an object (document, publication, etc.) digital.
- 4.3. Virtual teaching/learning environment is an information system of learning content, learning process management, student support, feedback, and communication tools for learning process participants.

- 4.4. Information system is a material system capable of receiving, collecting, storing, modifying, using and disseminating information. An information system consists of active (information sources, flows) and passive (documents) elements.
- 4.5. Other concepts used in the Programme correspond to the concepts used in the Law of the Republic of Lithuania on Science and Studies and other legal acts.
  - 5. The implementation period of the Programme is 2022-2025.
- 6. The Programme was prepared in accordance with the Strategy of Vilnius University of Applied Sciences for 2021-2025, Lithuania's Progress Strategy "Lithuania 2030", the National Progress Plan for 2021-2030, the State Digitisation Development Programme of the Ministry of Economy and Innovation of the Republic of Lithuania for 2021-2030, Progress Instrument No 12-003-03-01-02 "Digital Transformation of Education (EdTech)" of the education development programme of the manager, the Ministry of Education, Science and Sports of the Republic of Lithuania, of the development programme for 2021-2030, and the provisions of the documents of the European Higher Education Area.
- 7. In order to achieve the Programme's objective and to implement the action plan (the Action Plan) for the implementation of the University Digitalisation Programme for 2022-2025 (Annex), contributions will be made to the implementation of the Strategy of Vilnius University of Applied Sciences for 2021-2025.

# SECTION II ANALYSIS OF THE CURRENT SITUATION

8. On 9 March 2021, the European Commission set out its vision for Europe's digital transformation by 2030 (Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions "2030 Digital Compass: the European Way for the Digital Decade"). The EU's vision of the Digital Decade covers four key dimensions: digital skills, secure and sustainable digital infrastructure, the digital transformation of businesses, and the digitalisation of public services. The European Commission has set a target that by 2030, all essential public services will be fully digitised and provided online, 80% of citizens will use digital identification, at least 80% of the population will have basic digital skills, and 75% of EU businesses will use cloud and big data technologies.

- 9. To achieve the first strategic objective of the Strategy of Vilnius University of Applied Sciences for 2021-2025, "To provide professional higher education studies and lifelong learning that meet the needs of the Lithuanian and international labour market", the tasks are to "Improve the student-oriented study process", "Improve the internal quality assurance system for studies", and "Create a modern study environment" as well as their implementation measures "Develop accessibility of studies for persons with different study needs", "Select and continuously improve the methods, tools and procedures of the internal quality assurance system for studies", and "Improve the supply of studies with resources".
- 10. The second strategic objective of the Strategy of Vilnius University of Applied Sciences for 2021-2025, "To develop applied scientific research, experimental development (ASRED) and impactful professional arts of relevance to the world of activity", is to be achieved by the task "Carry out effective dissemination of results of ASRED, professional arts and project activities" and its implementation instrument "Digitise the results of ASRED and artistic activities".
- 11. To achieve the fourth strategic objective of strategic objective of the Strategy of Vilnius University of Applied Sciences for 2021-2025, "To foster an organisational culture focused on community mobilisation, socially responsible community", the objectives are to "Ensure the sustainability of the University's staff", "Strengthen the effectiveness of the University's self-governance", and "Strengthen internal and external communication" as well as their implementation instruments "Implement digital staff management tools", "Ensure the harmonisation of the functions of self-governing bodies, accessibility of participation of community members in self-governing bodies", and "Implement a communication management system that is responsive to the needs of the community and the society".
  - 12. The University uses the following:
- 12.1. Microsoft 365 service, which includes email, the TEAMS communication tool, document storage, sharing with other users, etc.
- 12.2. A help system where both students and lecturers can register a fault or problem, receive an answer, and see the steps to solving it.
- 12.3. The websites are powered by a content management system installed, updated and maintained by University staff, open source systems for hardware management, equipment monitoring and service availability monitoring are used.

- 12.4. The MOODLE *virtual learning environment* (version 3.11+ is used at the University) is one of the tools to support students' learning in every way. The environment is designed for all learners. The environment provides tools for presenting material, testing and assessing knowledge, communication and collaboration, as well as a space to use these tools. An e-learning environment is an information system for teaching/learning with all the characteristics of an information system. The University uses an electronic plagiarism detection system, which is integrated into the virtual learning environment, so no special software is required to use the system at the user's workstation.
- 12.5. The Academic Information System (AIS) is the University's main repository of digitised academic data. The first versions of the AIS have been in use in the University's academic environment for over a decade. It is a complex information structure consisting of subsystems developed at different times to meet different user needs. The AIS collects, organises and delivers relevant information to users of different needs and levels. Access to the information system is authenticated. These information systems serve the study process and related information. The University uses a clone of the AIS developed by Kaunas University of Technology, which was adapted to the needs of the University.
- 12.6. Since 2013, the University has been using the *Document Management System* (DMS), which makes it easier and simpler to create, submit, store, control and perform other administrative functions for the administration, faculty units and departments, and to collect documents for the archive. Staff and lecturers can see the documents assigned to them in one place. The system now also has an electronic signature function, which allows the use of only electronic document forms. Since 2018, the *Document Archive* module has been in operation, adapted to the needs of the University and integrated into the *Electronic Archive Information System* (EAIS).
- 12.7. Since 2014, the *Database of Lecturers* has been under development, with the main objective of creating a flow of information to the *Register of Teachers*. The database is currently being expanded in terms of both data volume and functionality. This includes accounting for lecturers and staff, as well as data management, analysis, and preparation of the necessary reports for both internal and external systems. The University's *Personnel* module accounts for all employee-related information and collects data on the activities of lecturers and staff.

- 12.8. *The Public Procurement Information System* (PPIS) has been used since 2017. This system covers all processes related to public procurement, from the submission of the application to the uploading of the invoice. It contains information on all procurement activities carried out by the University. All procurement is carried out exclusively through the PPIS.
- 12.9. The University uses the *Financial Management and Accounting Information System* (FMAIS), which provides full financial management and accounting. It also uses student financial accounting, which keeps track of the University's student finances (tuition fees, scholarships, etc.). From 2021, for its core financial functions the University uses the FMAIS administered by the Ministry of Finance of the Republic of Lithuania.
- 12.10. The University uses the LimeSurvey survey system to survey students, staff, and external users. The system not only allows for polling, but also for the analysis of the surveys that have taken place; surveys can be anonymous, open and closed. A database of surveys is built up, which allows analysing several years of data.
- 12.11. The *Library Information System* (LIS) Aleph 500: since 2003, the University library has been using the library information system by Ex Libris, which manages library information resources and automates library work processes. The system collects bibliographical data on information resources, keeps records of printed resources received, searches for publications, provides user services and statistical analysis of these processes. The maintenance and development of the LIS and the administration of the system are carried out by the eLABa consortium's information systems maintenance working group, with partial administration also carried out by the University's IT staff.
- 12.12. The Lithuanian Academic Electronic Library Information System (eLABa) is the national Lithuanian academic electronic library, which collects and makes available for public access research and study documents and/or their metadata. The eLABa integrates the metadata database (LIS) of the University's scientific and study documents; the database (PDB) of scientific (art) and study publications of Vilnius University of Applied Sciences. The eLABa PDB repository provides and stores data (descriptions, links to full-text documents) on the scientific and art publications of the University's staff and generates reports on scientific and art publications for lecturers and institutions.
- 12.13. The Virtual Library (VL) of Vilnius University of Applied Sciences: for search service, the University's library uses an Ex Libris product Primo software, and the Virtual Library (search gateway) of Vilnius University of Applied Sciences was installed on the basis

of this software. Users of the Virtual Library can search the University's LIS, PDB metadata databases, subscription-based electronic resources (scientific databases) and external sources (LIS, PDB, ETD of other institutions; open access resources). In the University's Virtual Library, by using a single authentication system, users can log in to their personal account—"Library Card"—and use the services provided by the library, e.g., to check publications that they have borrowed from the library; check and extend the borrowing deadlines or order the required publications, save search queries, records found, etc.

- 12.14. Electronic resources the University's library subscribes to various international and Lithuanian scientific databases, where the University users have access to electronic books, magazines, newspapers, statistical data and other resources. Electronic resources are accessible remotely via EZproxy tool and VPN. The University aims to make the content needed for teaching and studying available online and has significantly increased the number of electronic resources since 2017; in 2021, electronic resources accounted for 84% of the library's total resources.
- 13. All information systems and databases of the University are accessible via web browsers for internal and external users using a unified authentication system based on LDAP/AD and eduGAIN system tools. Users only need to remember a single login identifier and password. Most of the systems in use have interfaces with other internal systems, exchanging data depending on the tasks performed by the systems. This avoids duplication and repetition of data, and the interface through the user allows the end-user to access digital data from different systems more efficiently. The University's information systems and databases have interfaces with external digital information systems, such as the Student Register, the Lecturer Register, and the Virtual Library.

# SECTION III PURPOSE, OBJECTIVES AND DIRECTIONS

14. The aim of the Programme is to ensure effective management of the University's information resources and the interoperability of the University's information systems and registers. This will be achieved by improving the process of consolidating the management of the University's information resources and moving towards integrated IT service delivery. The Programme focuses on the design and development of the University's information systems, various e-services, tools and technological solutions based on artificial intelligence and data

analytics. The Programme includes measures to improve the accessibility of the University's internal data and digital skills.

- 15. Programme objectives:
- 15.1. To improve the student-oriented study process, to digitise business processes;
- 15.2. To improve the internal study quality assurance system and the efficiency of the organisation's business processes;
  - 15.3. To create a modern study environment and introduce digital study methods;
- 15.4. To carry out effective dissemination of the results of ASRED, professional arts, and project activities;
- 15.5. To analyse national and regional needs and socially responsible ASRED, professional arts, and project activities and to create an integrated database;
- 15.6. To ensure the sustainability of the University's staff and to improve the digital competences of lecturers;
  - 15.7. To strengthen the effectiveness of the University's self-governance;
- 15.8. To strengthen internal and external communication, digitise the University's business processes, and integrate and develop electronic services.
  - 16. Directions of digitalisation activities:
  - 16.1. Professional higher education studies;
  - 16.2. Applied scientific research, experimental development and professional arts;
    - 16.3. Regional and national impact;
    - 16.4. Human resources management.

## SECTION IV EVALUATION CRITERIA

- 17. The achievement of the Programme's objective and the directions of digitisation activities will be assessed against the following evaluation criteria:
  - 17.1. Share of remote study programmes in the total number of study programmes, %;
  - 17.2. An integrated academic and quality management information system (analytical criterion);
    - 17.3. Share of IT hardware and software upgrades, % of total equipment;

- 17.4. Digitised results of ASRED and artistic activities (number);
- 17.5. Analysis of the needs of the country and/or region(s), the means of meeting the needs and the likely impact on the development of the country and/or region(s) (analytical criterion);
- 17.6. Efficient operation of the personnel data IS subsystem (analytical criterion);
- 17.7. Number of community members using the University's information management systems;
- 17.8. A website of the University that meets the communication needs of the public and the community in both Lithuanian and English (analytical criterion).

### SECTION V IMPLEMENTATION

- 18. The Programme is implemented in accordance with the Action Plan (Annex 1).
- 19. Financing the Action Plan:
- 19.1. State budget funds;
- 19.2. Operating revenue funds;
- 19.3. European Union funds;
- 19.4. Other sources of funding.
- 20. The Programme is implemented at the level of the University, individual faculties and departments.
- 21. The implementation of the Programme is coordinated by the Deputy Director for Studies of the University.
- 22. At least once a year, the results of the Action Plan are discussed at the levels of the University, faculties and departments.

## SECTION VI FINAL PROVISIONS

23. The implementation of the Programme will result in a coherent and sustained implementation and development of digitalisation activities, the University's management of its various business processes and its impact on the regions and the country will be strengthened, and the needs of the labour market will be met.