APPLICATION

Study field "Architecture and Construction" for assessment

Study field	*Architecture and Construction*
Title of the higher education institution	*Vidzemes Augstskola*
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Self-evaluation report

Study field "Architecture and Construction"

Vidzeme University of Applied Sciences

Table of content

1. Information on the Higher Education Institution/College

1.1. Basic information on the higher education institution/ college and its strategic development fields,.

Vidzeme University of Applied Sciences (ViA) was established in 1996, and acquired a status of the State higher education institution in 2001. In 2002, ViA was accredited for an unspecified period. ViA offers high-quality study programmes and provides the balance between theory and practice. Study programmes are constantly updated and adapted to the current needs of society and changes in the labour market. The quality of education is ensured by experienced and professional teaching staff, advanced forms of study, and integrated research and academic work.

ViA offers college programmes, undergraduate, postgraduate and doctoral programmes, in total – 18 programmes. ViA study programmes are implemented in **five** study fields which are combined in two faculties – the Faculty of Engineering and the Faculty of Social Sciences. Information on the list of study fields and programs is provided *in Annex 1* of the self-evaluation report.

During the reporting period, the average number of students enrolled in ViA per year is 207 students, the average total number of students per year is 806, with an average drop-out rate of up to 189 students who have not completed the study program or passed the theoretical course. In addition to the total drop-out rate, the fact must be taken into account that some students resume their studies after exmatriculation in the later stages of studies (average 20 students per year) or for the development and defense of a national final thesis (average 36 students per year). The average number of graduates per year in the reporting period - 177 graduates. During the reporting period, the number of students tends to decrease to an average of 5% per year, citing the demographic situation in Latvia as a whole, as well as taking into account the development of priority study and research areas defined in the ViA strategy, consolidating several study programs. The detailed number of students can be reviewed in the annex to the report *(see Annex 2).*

Research work at ViA is carried out at two scientific institutes – the Institute of Social, Economic and Humanities Research (HESPI), established in 2015, and the Institute of Socio-Technical Systems Engineering (SSII), which was established in July 2006.

The vision of ViA – “ViA is an internationally recognized regional platform for higher education, science, knowledge transfer and idea leadership, offering versatile opportunities of the digital age ecosystem for acquiring professional higher education and interdisciplinary research, responding proactively to societal challenges.” The mission of ViA is to promote sustainable development of the knowledge society at the regional and national level, providing private and public sectors with high-level professionals, as well as conducting research to solve problems of public interest.

The previous ViA strategy 2016-2020 was developed and approved in 2015 during the leadership of Rector G.Krūmiņš. Work on the new strategy for 2021-2024 was started already in 2019. However, with the start of the reform of the higher education (HE) system, which focused on changing the governance model of HE, the development of the strategy was in line with the information available from education policy makers, delaying the strategy development process. Currently, the new ViA strategy has been developed, but it needs to be supplemented with the ViA Strategic Specialization, which is determined by the Ministry of Education and Science (MES), but a decision on this aspect has not yet been received. The strategic specializations of higher education institutions will be defined and known this year, in April. Throughout this period (from 2020), ViA works both according to the previous strategy, which, despite the time of development, is still relevant, and taking into account the active involvement in international partnerships and projects in recent years, partly according to the principles of the new strategy. Since 2020, ViA has been cooperating closely with Valmiera Municipality and Valmiera Development Agency,

and participated in Valmiera's strategic development planning for 2030, taking into account ViA's study and research offer and development opportunities, with the main emphasis on circular economy, wooden building construction, sustainable development, IT areas. These areas are included in the Valmiera Industrial Territories Development Plan, and it is planned to create 1770 new jobs in the planned period. In the context of city, county and regional development, ViA has defined tasks: preparation of a highly qualified workforce, provision of lifelong learning and retraining of the workforce, provision of research and promotion of innovations - development of new companies.

Refer to the annex for a list of ViA study programmes (see Annex 1).

Refer to the annex for student number dynamics during the assessment period (see Annex 2).

ViA strategy *both in Latvian and English* is available on the ViA website.

1.2. Description of the management structure of the higher education institution/ college, the main institutions involved in the decision-making process, their composition (percentage depending on the position, for instance, the academic staff, administrative staff members, students), and the powers of these institutions.

ViA is a derived public person. ViA was founded by the State, and its legal operation is regulated by the ViA Constitution. ViA is managed in accordance with the democratic management style and the principle of collegiality. Faculty deans and heads of other academic and administrative structures, as well as representatives of the student board are involved in the decision-making process, planning and implementation of ViA operational and strategic management. Operational management issues are addressed at weekly management meetings. ViA operational management is organized by the administrative vice-rector. The meetings are open, and information of the meetings is sent electronically to ViA staff. In order to assess the current processes and to successfully organize the study work, once a month ViA helds workshops of the study field and study programme directors, as well as meetings to deal with development, academic and scientific issues.

ViA decision-making institutions:

Constitutional Assembly – the highest management institution of ViA, which approves the Constitution of ViA and its amendments, elects the Rector, as well as may initiate the removal of the Rector from his position; hears and approves the annual reports on ViA performance prepared by the Chairman of the ViA Council, the Rector, the Chairman of the Senate and the Audit Commission; elects the members of the Senate from among the academic and general staff and approves the regulations of the Senate, as well as may recall the members of the Senate; forms and elects the Audit Commission; elects the Academic Arbitration Court and approves its regulations, as well as reviews and decides on other strategic issues related to the activities of ViA and does not fall within the competence of other administrative institutions. The Constitutional Assembly is elected for three years. The Constitutional Assembly consists of 40 persons, of whom 24 representatives are elected from the academic staff, 8 representatives are elected from the general staff, and 8 representatives are elected from among the students.

ViA Council - a collegial highest decision-making body of ViA (consisting of 5 members of the Council), which is responsible for the sustainable development, strategic and financial supervision of ViA, as well as ensures the operation of ViA in accordance with the objectives set in its development strategy. The operation of the ViA Council is determined by the ViA Constitution, the regulatory enactments of the Republic of Latvia and the corresponding regulations of the ViA Council. The ViA Council protects the autonomy of ViA, as well as respects the academic freedom of academic staff and students and

promotes its implementation.

Senate – collegial ViA's highest academic decision-making body, which is responsible for the excellence, development and compliance with internationally recognized quality standards of higher education, research and creative activities. The Senate regulates ViA's academic, creative and scientific activities. The Senate is elected for three years; its election and operation are determined in accordance with the Law on Higher Education Institutions, as well as the regulations of the Senate, which are approved by the Constitutional Assembly. The Senate consists of 15 senators: 11 representatives of the academic staff (73%), three representatives of the students (20%) and administrative staff (rector) - (7%).

Rector - the highest official of the higher education institution (HEI) who implements the general administrative management of the HEI and represents the HEI without special authorization. When establishing a structural unit for the performance of organizational, economic and service work, the Rector shall approve its regulations and determine the procedures for its establishment, financing and supervision, as well as the basic rules of operation. When taking decisions on the reorganization or liquidation of a structural unit, the Rector shall determine the procedure for the implementation of the said decisions. In accordance with the goals set in the ViA Development Strategy, the Rector appoints and removes Vice-Rectors, as well as determines their areas of competence, powers and responsibilities in accordance with the procedure for nomination, appointment and removal of ViA Vice-Rectors approved by the ViA Council and Senate. In accordance with the goals set in the ViA development strategy, the Faculty Council nominates and the Rector appoints and dismisses the Deans, as well as determines their areas of competence, powers and responsibilities. The Rector supervises the scientific activity of ViA.

Academic Arbitration Court – is a permanent ViA institution that reviews applications of students and academic staff regarding restrictions or violations of academic freedom and rights specified in the Constitution of the ViA, disputes between ViA officials, as well as administrative units of structural units in subordinate relations, as well as in cases specified in the Law on Higher Education contesting an act or actual action and taking relevant decisions regarding them, as well as performing other tasks provided for in the Constitution of the ViA. The Arbitration Court consists of 3 (three) members, of whom 2 (two) are elected by secret ballot by the Constitutional Assembly from among the academic staff elected to academic positions (67%), and 1 (one) is elected by the student self-government from among full-time students (33%).

Audit Commission - a representative institution of ViA, which performs internal audit tasks and operates in accordance with the laws and regulations of the Republic of Latvia, the Constitution of the ViA and other internal laws and regulations of the University. The purpose of the Audit Commission is to check the compliance of the activities of ViA with the regulatory enactments of the Republic of Latvia, the Constitution of ViA and other internal regulations of the university, as well as the decisions of the Constitutional Assembly, ViA Council and Senate. The Audit Commission consisting of 3 (three) persons is elected by the Constitutional Assembly for three years. The members of the Audit Commission may be removed by the Constitutional Assembly. Representatives of the elected academic staff and students may be elected to the Audit Commission.

Assemblies of the Faculties are collegiate decision-making institutions for academic, scientific and research activities of the faculties. The Assembly of the Faculty of Social Sciences consists of 13 (thirteen) members: 10 (ten) representatives of the academic staff (77%), 3 (three) representatives of students (23%). The Assembly of the Faculty of Engineering consists of 8 (eight) members: 6 (six) representatives of the academic or research staff (75%), 2 (two) representatives of the students (25%).

Due to changes in the university's governance model, the new governance structure has not yet been approved by ViA. Its approval, according to the new procedure, is the responsibility of the ViA Council. At the time of submitting the self-assessment report, the ViA Council has not yet had a formal decision-making power. The annex to the report provides an overview of the current ViA governance structure.

Refer to the annex for ViA structure (see Annex 3).

Refer to the annex for the list of the main ViA internal normative documents and regulations (see Annex 4).

1.3. Description of the mechanism for the implementation of the quality policy and the procedures for the assurance of the quality of higher education. Description of the stakeholders involved in the development and improvement of the quality assurance system and their role in these processes.

ViA Study Quality Assurance Policy is part of ViA quality management system promoting ViA internal quality culture and its continuous improvement. It has been developed, reviewed and implemented in accordance with the *Standards and Guidelines for Quality Assurance in the European Higher Education Area (2015)*, *the Law on Higher Education Institutions* of the Republic of Latvia and other regulatory enactments, while taking into account the views and needs of ViA's internal and external stakeholders. The policy supports the development of a quality culture in which all internal stakeholders take responsibility for the quality and engage in the quality assurance at all levels.

The following is an overview of the different aspects of the quality assurance system.

Quality assurance policy and measures

Vidzeme University of Applied Sciences has developed and approved the Development Strategy for 2016-2020 which envisages striving for excellence and competitiveness in education, striving for excellence and competitiveness in science and research, as well as striving for knowledge transfer and investment in regional development. After 2022, the ViA Council will decide on the development of strategy and financial issues (in accordance with the Law on Higher Education Institutions). ViA has a **Strategic Consultative Council** established to promote creative discussion and generate ideas that would facilitate the definition of a reasonable, attractive and imaginable future scene (vision) and strategic path for ViA. The FE (the Faculty of Engineering) implements the achievement of strategic goals in the study fields of the faculty. Strategic control over the development of ViA is exercised by the ViA Senate, while administrative and accounting control are exercised by the Faculty of Engineering. The Faculty of Engineering assesses its operations and planned activities on a regular basis (once a week). Important issues are decided at the monthly meetings of the assembly of the faculty. ViA has a **Scientific Council** which task is to promote coordinated and purposeful ViA academic and research activities in accordance with the ViA strategy. The Council advises and, if necessary, prepares proposals for the Senate and the Rector on strategical issues of the academic and scientific research activities important for the higher education institution, including launching new research directions in ViA. The qualifications and competencies of the academic staff are assessed on the basis of their professional, academic and scientific achievements. Every year, the development of the study field is assessed as the self-assessment report is prepared and discussed within the study field, at the faculty level, and also in the ViA Senate. Since 2018, the consultative councils of the study programmes have also been involved in quality management, the study programme "Wooden Houses and Eco-Building" also has its consultative council of 10 members, including a student representative. Every year after the defence of the qualification papers, the study programme director has organized feedback interviews with the members of the qualification examination commission on the quality of the study programme results, listening to their recommendations, suggestions and admonitions. ViA has approved a number of documents that regulate the relationships between teaching and research, the institution's quality and requirement strategy, and the organization of the quality assurance system. There is a regulation in place laying down responsibilities of faculties, fields of study, other structural units and persons for

quality assurance, as well as specifying the participation of students in quality assurance, and the ways of implementing, monitoring and adjusting the quality policy. All regulatory documents are available to both students and academic staff on the ViA e-environment. Students are informed both in the introductory lectures and later in the study process about their rights and opportunities to participate in the development and implementation of ViA development policy. ViA student self-government which delegates candidates to the ViA Senate and Constitutional Assembly elections, organizes a meeting with ViA Rector and/or heads of the study fields as needed. ViA has developed the **Procedure for the Development, Approval and Supervision of the Study Programmes** and other documents, regulations related to ensuring the high-quality study process.

The study programmes and their components are developed to meet the goals, which, in their turn, correspond to the **ViA strategy**. Study programmes are developed using the vision of external stakeholders, they correspond to the defined learning outcomes which comply with the *Latvian and European Qualifications Framework*.

Quality assurance and assessment of the work of the academic staff

ViA has a number of measures in place to make sure and verify suitability of lecturers qualifications and competences for working with students, i.e., requirements are laid down in ViA **Regulations on Election to Academic Positions,** ViA **Regulations of Remuneration** contain breakdown of academic work, conditions for research work, likewise student surveys after each lecturer's study course in the respective semester are also taken into account. ViA Senate has approved **a job description of the teaching staff**; it lays down requirements for academic work, research, academic and scientific qualification improvement, as well as administrative work. In order to ensure improvement of skills, work quality and professional development of ViA academic staff, the lecturer is given an opportunity to supplement and expand his/her knowledge and professionalism by gaining foreign experience or engaging in internship at foreign higher education institutions/organizations, as well as by participating in relevant seminars and conferences – within Erasmus, etc. mobility programmes. Once per academic year (in October), the lecturer must submit a report to the dean of the faculty specifying his or her achievements in scientific work, experience gained in projects, seminars and conferences attended during the previous academic year.

The information submitted is used for the preparation of scientific reports and self-assessment reports of the study fields. In order to provide an opportunity for lecturers to improve and monitor the quality of their academic work, ViA implements various activities, incl. study course assessment surveys and study course observations. The academic staff of the field "Architecture and Construction" consists of elected lecturers, as well as of industry professionals who give not only individual guest lectures, but also teach complete study courses. This is one of the ways to balance the acquisition of theoretical and practical knowledge in the study content. The decision on the approval of both the elected lecturers (lecturers, assistant professors) and guest lecturers, based on the decision of the study field "Architecture and Construction", is made by the Assembly of Faculty after getting acquainted with each applicant's qualifications and competencies. For the purpose of improving professional skills, ViA's elected lecturers participate in Erasmus+ and other professional development mobilities, attend courses offered by ViA, participate in the activities of professional organizations, etc.

Resources for academic work and research, support for students

ViA material and technical base and infrastructure enable students to acquire knowledge providing proper, suitable and available resources for each study programme. ViA library provides information resources necessary for academic and scientific activities, access to scientific articles and other electronic information databases from the ViA library portal. ViA also has e-learning environment which is an interactive student support environment containing study materials, it ensures electronic exchange of documents and communication with a lecturer, it also provides for an opportunity to submit test papers.

ViA has two buildings for the study process, science, research and administrative activities, with a total area of 7312 m^2 of which 2387 m^2 are used directly for the study and research process. The current study base consists of 38 classrooms (total area of 1445 m^2), including 3 computer classrooms with 90 workstations and Internet connection (195 m^2) and 12 laboratories: *Construction Laboratory; Spatial Research Laboratory; Energy Efficiency Laboratory; Data Security Laboratory* (*Cyber Security Laboratory); Computer Network Laboratory; Virtual Reality Laboratory; assets of the Multimedia Laboratory for study management and technology research field; assets of the Multimedia Laboratory for communication ecosystems and technology research field; Laboratory of Simulation Modelling and RFID Technologies; Mobile Technology Laboratory; Mechatronics Laboratory; Electrical Engineering Laboratory* (total area 324 m^2). All computers are connected in a common network providing a unified information circulation; access to the Internet and usage of databases are also ensured. Subscribed full-text databases are accessible by logging in from anywhere where the Internet is available. A conference hall (257 m^2) is also used for the study process; the study buildings have rooms for group work and rooms where students can work independently (350 m^2). Booking and reservation system intended for booking premises, lecture-rooms and hostel rooms provides for a possibility to follow the lecture schedule.

ViA provides career development support services to students and applicants, enabling them to make decisions on the future education or employment, to find the most appropriate study field, to choose the most appropriate ways for developing their competencies through personal and ViA's resources, to prepare for successful professional activities, to develop their personality by achieving professional goals, to plan further education, to start their own business, as well as provides support regarding other career issues. The main career development activities at ViA are career counselling for students individually or in small groups (including counselling on writing CV, job hunting, getting ready for job interviews, etc.), as well as counselling for applicants helping choose the most suitable study field for starting studies at ViA. The mentor movement is also being developed, involving ViA graduates. ViA closely cooperates with companies of the industry, regularly informing students on current job vacancies and internship offers, and helps students get ready for starting the job and internship. Career development support is also fully integrated into study courses, raising awareness of employment in the industry through collaboration with industry experts and specialists.

Information management

ViA key performance indicators are assessed and analyzed on an annual basis and reflected in self-assessment reports, annual management reports and other types of reports, while information on the student academic progress, achievements and drop-out rates, student satisfaction with the study programmes and graduate career is collected centrally, using both qualitative and quantitative methods – analysis of statistical and financial indicators, document analysis, as well as surveys of applicants, students and graduates.

ViA ensures efficient collection of information necessary for the management of study programmes and other processes through ViA website and social networks, as well as through ViA study administration information system *LAIS* (which provides for a possibility to collect data on all aspects of studies and successfully use them in the study process, besides students can keep track of their study assessment progress in their profiles), Record Keeping System, E-learning environment *Moodle*, ViA alumni database, Library system *ALISE*, Accounting system *Horizon*, and Study and student loan accounting system.

Information to the public

ViA regularly publishes up-to-date, neutral and impartial information of its activities on the website, including information on the college, Bachelor's, Master's, and higher level study programmes, degrees/qualifications and selection criteria for admission; expected learning outcomes of the programmes, qualifications to be awarded, teaching, learning and result assessment procedures, the minimum satisfactory grades or requirements, learning opportunities available to students and extracurricular activities, as well as information on career possibilities after graduation and graduate employment.

Each year ViA prepares, approves and publishes self-assessment reports of the study fields, as well as admission rules for the current academic year. ViA lecturers and employees are actively involved in the development of public opinion in the region and Latvia by participating in conferences, seminars, public lectures, NGO activities, by publishing scientific publications; the most up-to-date information of the above is posted on the ViA social media accounts and website, thus promoting higher education and study programmes.

ViA regularly posts up-to-date, neutral and impartial information on its activities, programmes and degrees/qualifications on social media – *Facebook*, *Twitter*, *draugiem.lv, Instagram, YouTube*, as well as in printed leaflets and other handouts. Besides, up-to-date information that is relevant to current and future students, graduates, and other stakeholders and the public is posted on social media in Latvian and English. Information that is relevant to a specific person or groups of people, such as lecturers, ViA's administration staff, or students of a particular study programme, is emailed.

A contact with ViA graduates is maintained by help of the *Facebook* group "ViA Alumni", where ViA posts up-to-date information that is relevant to graduates, such as employment possibilities at ViA, gatherings, possible participation in events.

Media of the industry and other means of media at the regional and national level are also informed of ViA's activities and current events, inviting them to distribute information to the general public through print, electronic media or other versions and/or on their social media accounts. Besides, within the limits of competence, media representatives are provided with relevant information on current events, developments and news related to ViA, its staff, or students. Media monitoring is carried out on a daily basis, collecting information of ViA and current events related to it which is published in the media. Upon assessing the relevance and appropriateness of the information, it is re-posted on the institution's social media accounts.

Lecturers, students and graduates are interviewed in order to promote study fields, those interviews (print interviews and video interviews) are published on ViA website, as well as posted on social media *Facebook, Twitter, draugiem.lv, Instagram* and *YouTube*. Besides, to promote study fields, ViA's website and social media accounts feature information on students' individual work, achievements in science, conferences, competitions, as well as on the study process and possibilities to improve their knowledge in ViA laboratories, during internship at companies, through courses, classes, creative workshops offered by ViA, etc. In order to ensure ViA publicity outside Latvia, information on ViA study programmes and possibilities for joint projects is presented to foreign cooperation partners within the framework of the mobility programmes.

Lecturers of the study field "Architecture and Construction" regularly participate in local and international conferences, seminars, public discussions as opinion leaders, act as experts in European Union projects on an international scale, regularly acquire new knowledge as participants in experience exchange missions, thus promoting the name of ViA and the field and helping establish new cooperation links.

Vidzeme University of Applied Sciences and specifically the field of "Architecture and Construction" is a member of the Association for Construction Industry Digitalisation of Latvia, ViA is the first higher education institution which has officially joined the association. ViA is represented in the association by the study field director. It should be mentioned that at the initiative of ViA, the Association for Construction Industry Digitalisation of Latvia is also represented in the Industry Expert Council of the LDDK (Employers' Confederation of Latvia) and is represented by the study field director. Thus, the study field develops hand in hand with the most advanced companies of the industry and actively follows and initiates positive changes in the organization of the industry. Lecturers of the field as founders or members work for several organizations of the industry and related organizations such as the association "Ecodesign Competence Centre", "Koka Rīga", SIA "Forest and Wood Products Research and Development Institute", thus promoting ViA and the study programmes of the study field "Architecture and Construction", and providing feedback to the industry. Vidzeme University of Applied Sciences was

one of the organizers of the Construction Digitalization Conference in 2021, moderating the education section “BIM in Professional and Higher Education”.

As the study field develops, it is expected that cooperation with progressive, innovative industry organizations and entrepreneurs will expand, thus strengthening the brand and awareness of the field.

Cooperation with students and graduates

Every year ViA conducts student opinion surveys on compliance of the study programmes implemented at the higher education institution with the students’ expectations, on the quality of the study programmes, informative, material and technical provision, the quality of the academic staff, the quality of international cooperation, as well as on other issues. Results of surveys are analyzed and assessed, and decisions on various changes and improvements are made on the basis of these results. Responses are used for planning development and ViA performance improvement.

At the level of the study field, at the end of each semester, the study field director summarizes the results of the survey, reviews them, analyzes responses given by the students and summarizes suggestions for improvement which are discussed with the teaching staff. Within the framework of the discussions, the necessary improvements in the course content, teaching methods, mutual cooperation between lecturers within the semester and the year are also reviewed.

Before the pandemic, the study programme director organized in-person meetings with students, visited lectures with a purpose of monitoring, and informed students of current events, but during the outbreak of the pandemic, communication with students was organized by means of virtual meetings, keeping it as open and accessible as possible. The director of the study programme informs students of current information, events, additional education and self-growth opportunities in the form of short newsletters in written or video format. This is an opportunity for students to share their recommendations for improvement, to appreciate the work of lecturers, and to pass on information to other students. As part of this communication, it is very important to keep the format open and accessible, which we also managed to do, as evidenced by the increase in the numbers of views and feedback in 2020-2021.

As part of development of the study field, it is planned to expand feedback in a digital format – encouraging students to offer field trips to their companies and share additional educational opportunities, conferences, e-courses using the *Microsoft Teams* website.

ViA has active student self-government – Vidzeme University of Applied Sciences Student Association, during the reporting period students of the programme have been generally little involved in the work of the self-government with a few exceptions (a student of the programme was a member of the board of the association), but this has not significantly affected the feedback in terms of study quality. Wider cooperation has been developed with the ECO Student Council which has involved students of the programme in practical projects integrated in the early courses of the programme such as competitions and development of ideas for the improvement of ViA territory.

ViA also conducts a graduate survey on an annual basis. The main purpose is to document satisfaction of the graduates with their education immediately after graduation, as well as to collect data on graduate employment. A survey is conducted a year after graduation. The results of surveys show successful integration of the graduates of the Bachelor’s and Master’s programmes into the labour market, they work in the private, public and municipal sector of the industry in accordance with the qualification acquired. Graduates of the programme are employed in the construction industry (100 % of the respondents had a job in 2021). Inclusion in the labour market and successful career are ensured by the comprehensive professional training allowing to adapt to the labour market, to develop entrepreneurship. (50 % of the respondents in 2019 are self-employed or employers) Within the framework of the study field, as far as possible, lecturers maintain contacts with graduates on social media, meeting them in public events, involving them as guest lecturers, internship providers, members of the State examination commission, as well as including them in the working group which prepared the self-assessment report.

In addition to the assessment questionnaires, the principles of community building, the principles of information, resources and mutual learning dominate in cooperation between students and graduates, it is planned to further strengthen these principles in the future development of the field and improvement of the programmes, cooperation with companies also plays an important role.

Refer to the annex for the Study Quality Assurance Policy of Vidzeme University of Applied Sciences *(see Annex 5)*.

ViA Study Quality Assurance Policy is also available on ViA website: https://va.lv/en/about-us/documents

1.4. Fill in the table on the compliance of the internal quality assurance system of the higher education institution/ college with the provisions of Section 5, Paragraph 2(1) of the Law on Higher Education Institutions by providing a justification for the given statement. In addition, it is also possible to refer to the respective chapter of the Self-Assessment Report, where the provided information serves as justification.

1.	The higher education institution/ college has established a policy and procedures for assuring the quality of higher education.	see 1.3. (part I)
2.	A mechanism for the creation and internal approval of the study programmes of the higher education institution/ college, as well as the supervision of their performance and periodic inspection thereof, has been developed.	see 1.3. (part I)
3.	The criteria, conditions, and procedures for the evaluation of students' results, which enable reassurance of the achievement of the intended learning outcomes, have been developed and made public.	see 1.3. (part I)
4.	Internal procedures and mechanisms for assuring the qualifications of the academic staff and the work quality have been developed.	see 1.3. (part I)
5.	The higher education institution/ college ensures the collection and analysis of the information on the study achievements of the students, employment of the graduates, satisfaction of the students with the study programme, efficiency of the work of the academic staff, the study funds available, and the disbursements thereof, as well as the key performance indicators of the higher education institution/ college.	see 1.3. (part I)

6.	The higher education institution/ college shall ensure continuous improvement, development, and efficient performance of the study field whilst implementing their quality assurance systems.	see 1.3. (part I)

2.1. Management of the Study Field

2.1.1. Aims of the study field and their compliance with the scope of activities of the higher education institution/ college, the strategic development fields, as well as the development needs of the society and the national economy. The assessment of the interrelation of the study field and the study programmes included in it.

The study field “Architecture and Construction” of Vidzeme University of Applied Sciences was established in 2013 based on the demand pointed out in the construction industry development strategy of Latvia for 2017-2024 in which an increase in the demand for qualified specialists by up to 45 % in 2030 was anticipated. Although the strategy has not been updated, it is already clear that the Latvian construction sector is in danger of overheating in the next planning period due to the influx related to the new planning period of the EU funding and the implementation of large-scale projects not only in Latvia but also in the Baltic States. One of such projects is Rail Baltica which directly affects Vidzeme region and opens up opportunities for increasing the competitiveness of the region’s construction companies.

Within the framework of the circular economy pilot project of Vidzeme, a total increase of 49 % in the total demand for students in various fields of engineering, including construction, is planned in Vidzeme region, but, as already mentioned, the real demand due to the Rail Baltica project could be much higher. The only question is whether the construction companies of the region will be able to meet such a demand, comply with the project requirements and compete internationally.

Along with globalization and the entry of international larger-scale projects in Latvia and the free flow of labour force, the market of the industry is to be analyzed on a larger scale, but taking into account that the study programme is not currently offered in the international education market and is taught in Latvian, its comparison is to be limited only to Latvia. According to the data of the Quality Agency for Higher Education, seven higher education institutions had a study field “Architecture and Construction” in the academic year of 2019/2020 with a total of 39 accredited study programmes. The study programme which offers the qualification of a construction manager is accredited in five higher education institutions: Vidzeme University of Applied Sciences, Latvia University of Life Sciences and Technologies, Rezekne Academy of Technologies, Riga Building College, and Riga Technical University (RTU). Although Riga Technical University has a branch in Cēsis, it does not offer a programme in the study field “Architecture and Construction”. Currently, Riga Technical University offers a programme “Construction Management” in its branches in Daugavpils and Liepāja *(according to RTU website information).* In essence, ViA is the only educational institution in the entire Vidzeme region that offers higher education in construction. Comparing the study programmes in terms of credit points, Riga Technical University, like ViA, has so far offered a qualification in the amount of 100 CP in 2.5 years. Other higher education institutions implement the full-time study programme in 3 years in the amount of 120 CP. Longer study programmes offer also a possibility to take courses in road and bridge building (in the amount of 2CP or 3CP) and thus to qualify for a construction manager’s certificate in motor road,

street and road construction.

In the next accreditation period, the programme will change its name from “Construction of Wooden Houses and Eco-Building” to “Construction of Sustainable Buildings” offering a possibility to acquire the qualification of a construction manager of buildings in 3 years in the amount of 120 CP.

Refer to the annex “Development Plan of the Study Programme” for more information about changes in the positioning and structure of the study field and the programme (Annex No. 6).

The development of the study field “Architecture and Construction” is based on the goals of sustainable development of Vidzeme region implemented in connection with the overall development strategy of Vidzeme University of Applied Sciences and the development strategy of the EU Higher Education Area; the strategic goal of Via is to develop as an innovative regional centre for academic and professional higher education and research, providing interdisciplinary, practically applicable and innovative higher education providing the labour market with competent specialists, purposefully promoting the commercialization of ViA education and research products and knowledge transfer, thus strengthening the competitiveness of Vidzeme region.

The strategic goals of the study field for the period of 2013 – 2020 correspond to the strategic goal of Vidzeme University of Applied Sciences:

- To develop appropriate competencies for those already working in the construction industry who have not acquired the education suitable for the labour market and necessary for specialists in the industry;
- To provide students with practically oriented higher professional education in the area of construction;
- To develop students’ research skills and the desire to explore the world around them, on the basis of which to develop students’ competencies for their further self-education process and to create motivation for further education;
- To provide students with the necessary set of knowledge, skills and competencies in the area of construction, so that after successful completion of the study programme they would be able to work for private, public and municipal companies, promoting competitiveness in the changing socio-economic conditions;
- To ensure the development of versatile personality skills.

The studies are focused on professional higher education and close cooperation with the industry professionals. This approach has yielded good results in terms of ViA graduate employment – more than 90 % of graduates are employed in the industry and continue to develop their career.

ViA proactively monitors labour market and economic development trends, assesses the sustainability of the study programmes and is not afraid to carry out reforms if necessary. Based on an in-depth study of the situation, ViA regularly integrates into all study programmes relevant skills the demand of which is expected to increase in the future labour market, for example, by including topics on energy efficiency, ecology, passive house construction in the content of the courses and strengthening digital construction competencies. While writing the self-assessment report and preparing the study programme for re-accreditation, significant changes have been made, clearly marking the new, current trends which the construction industry faces, and due to ViA’s interdisciplinary approach, current technologies such as the use of virtual reality in construction have been integrated in the study field. (Refer to the Development Plan of the Study Field for emphases of the field and programmes)

During the reporting period (2013-2020), the understanding of the construction industry has changed due to changes which are taking place in the construction industry both within the European Union and globally. New requirements are being set for environmental protection, sustainable construction, efficient use of energy resources, preservation of cultural heritage and its adjusting to the needs of modern society. There is a move towards a sustainable construction development model that creates a

high-quality living environment for current and future generations, as a result of which there will be an increase in the demand for qualified construction professionals who successfully operate in sustainable construction. Already now, there is a significant shortage of construction specialists who are able to practically implement sustainable projects. The growth of demand in the future is indicated by such construction strategies of the European Union as “Green Course Europe”, “New European Bauhaus”, “Renovation wave EU” which re-emphasize sustainable construction using sustainable materials, incl. wood. Local policy and guidelines for the implementation of large-scale construction projects such as Rail Baltica and the quality requirements of major players such as the State Real Estate are also relevant.

The Latvian Building Council, the largest non-governmental organizations of the construction industry and the Ministry of Economics have agreed on the Latvian Construction Industry Development Strategy for 2024 (hereinafter – the Strategy) and approved it at the Latvian Building Council meeting on 13 April 2017. The main task of the strategy is to determine a unified policy for the development of a sustainable and competitive Latvian construction industry.

In order to achieve the development vision of the Latvian construction industry, the Latvian Building Council has defined five strategic development goals of the industry:

- to reduce the bureaucracy of construction regulation by reducing the overall time of the process by 50 % and digitizing solutions, thus ensuring a more efficient construction process;
- to triple the industry’s productivity to reach the average indicator of TOP 10 EU Member States;
- to increase the construction industry’s turnover from the current EUR 1.5 billion a year to EUR 3 billion a year;
- to improve the education and professional qualification system of construction specialists by ensuring that there are highly qualified specialists in every construction profession;
- to improve the quality of construction services while creating a unified quality measurement system.

The strategic goals of the Latvian construction industry support the goals of the European Union Construction 2020 which are as follows:

1. to promote favourable investment conditions,
2. to improve the human capital base in the construction industry,
3. to improve resource efficiency, ecological parameters and business opportunities
4. to strengthen the internal market of the construction industry,
5. to promote the global competitiveness of the EU construction companies.

The medium-term development goals of construction are as follows:

- steady increase in volume;
- raising productivity;
- industry service quality index;
- smart and qualified specialists;
- efficient construction processes.

Construction and the manufacture of construction products are a labour-intensive industry with a growing demand for skilled professionals in a competitive market. The planned future development forecasts of the Ministry of Economics in the construction industry are as follows:

- in 2030, the number of employees will increase by 9 %, including:
- the number of highly qualified professionals will increase by 45%;
- the average number of qualified professionals will increase by 6 %;

- the number of the low-skilled persons will decrease by 30 %.

Skilled workforce is a cornerstone for construction companies and also for the development, sustainability and competitiveness of the entire construction industry. The industry aims for highly qualified professionals at every stage of the construction chain, from managers, architects, civil engineers to construction workers.

Continuing the development of the study field, the following strategic goals have been set for the period of 2021-2027:

- To develop a recognizable quality mark of the study field in Vidzeme region and Latvia;
- To define and develop strategic research, innovation and specialization directions that would be unique and competitive in the Baltic Sea Region;
- To respond to the industry's demand for modern and advanced young professionals to help increase the productivity and competitiveness of the construction industry both locally and internationally.

Tasks of the study field for the period of 2021-2027:

- To establish a centre of knowledge and experience (a "hotspot") on sustainable building construction practices, ensuring cooperation with designers;
- To provide students with practically oriented higher professional education in the field of construction, using opportunities provided by the companies within the industry and the region;
- To develop an adaptable training offer for companies and their employees in certain specializations;
- To develop students' research skills and the desire to explore the world around them, on the basis of which to develop students' competencies for their further self-education process and to create motivation for further education;
- To provide students with the necessary set of knowledge, skills, competencies in the field of construction to enable them, after successful completion of the study programme, to operate in private, public and municipal companies, promoting competitiveness in changing socio-economic conditions;
- To ensure the development of versatile personality skills.

Refer to annex for the "Development Plan of the Study Programme" (Annex No. 6).

2.1.2. SWOT analysis of the study field with regard to the set aims by providing explanations on how the higher education institution/ college expects to eliminate/ improve weaknesses, prevent threats, and avail themselves of the given opportunities, etc. The assessment of the plan for the development of the study field for the next six years and the procedure of the elaboration thereof. In case there is no development plan elaborated or the aims/ objectives are set for a shorter period of time, information on the elaboration of the plan for the development of the study field for the next assessment period shall be provided.

Assessing ViA's capacity, as well as the work done so far, ViA plans to continue working on strengthening the programme of the study field in the coming years. Support in strengthening the study programmes is also provided by ESF SAM 8.2.1. and SAM 8.2.2. activities of the operational programme, within which the work is underway to reduce the fragmentation of the study programmes, to strengthen resources, as well as to strengthen the academic staff in the areas of strategic specialization.

Refer to the annex for the Development Plan of the Study Field.

1.Table. SWOT analysis of the study field

STRENGTHS	WEAKNESSES
§ Supplying the region with sustainable-minded construction industry employees, meeting the demand in Vidzeme region; § Individual approach to the study process and individual feedback, more attention to students as personalities and to their growth; § Employment of graduates in the industry and career development, flexibility and ability to adapt to the needs of the industry; § Interdisciplinarity and "cross-curriculum links" with other engineering students (IT, virtual reality, cyber security, mechatronics, etc.) as a basis for the potential to create new products and services; § A wide range of applications (software) resulting from the available resources of the IT, cybersecurity, virtual reality programmes. § Modern study methods, e-learning and technologies, use of e-environment in the study process, distance learning possibilities; § Improving the qualification of ViA lecturers by attending various professional courses, seminars and participating in the work of non-governmental organizations within the industry; § The content of the programme complies with the requirements of the State professional higher education standard and the current occupational standard; § The content of studies is relevant and adapted to the new competencies required in the construction industry; § Approximation of the study process and internship using cooperation companies and partners in the construction industry; § The programme is taught by the qualified academic staff and practitioners in the field of construction; § A Construction Laboratory, an equipped Energy Efficiency Laboratory have been established, and resources of cooperation partners are available; § Field trips to companies (for example, SIA "Dores fabrika", SIA "Husvik", SIA "BYKO LAT", SIA "3D Engineering", SIA "Pavasars Housing", SIA "EcoHouse", SIA "AB Clausen Latvia", SIA "GeoStar", SIA "Norddeck")	§ The level of recognition of the study field and the programme is low in the region and in Latvia, many do not know about the programme at all; § A clear model of cooperation with other higher education institutions (in Latvia and the EU), in which it would be possible to supplement knowledge or continue studies at the next level; § Renewed/new team of lecturers, it takes time to adapt to the new model of cooperation; § The director of the field has to do a lot of micro-management activities depriving of time for working on the fundamental development of the field/programme; § Relatively low student involvement in the both study and internship mobility programmes, poor understanding of benefits; § Low remuneration of academic staff making it difficult to attract and retain high-level professionals and to initiate scientific interest; § Insufficient involvement in the State level grants for science, so far there has been a lack of development/research direction and also a lack of staff who would like to participate in scientific activities at a deeper level; § Lecturers do not use the opportunities of international cooperation because almost all of them have permanent jobs in the industry on a daily basis, remote mobility can improve this.

OPPORTUNITIES

§ Development of specialization, setting development goals for the research and study field that is competitive/unique in Europe and meets the growing demand in the future;
§ To create a strong, specific and recognizable brand of the study field and programmes in Latvia;
§ To access to and adaptability of education and learning, creating new ways and forms of receiving training/educational products;
§ Opening of the study courses/programmes in foreign languages and developing of a specialized offer for foreign students in specialized fields;
§ Demand for workforce and limited resources provide for new cooperation opportunities with companies and stimulate their interest;
§ Attracting new representatives of the academic staff, increasing the quality of the study programme;
§ Establishment of a specialization such as a wood construction or eco-building centre in cooperation with an international network of partners;
§ Cooperation with foreign and Latvian higher education institutions in the implementation of joint study programmes, scientific research projects and State research programmes;
§ Participation in the international projects to strengthen the training offer and specialization (Horizon, EU);
§ Changes in demand and supply or a broader view to students – including lifelong learning, individual training courses for entrepreneurs and company employees, e-environment and virtual reality training;
§ Distance learning opportunities (in the context of a pandemic);
§ To promote internship of the academic staff, ensuring the connectivity between theory and practice, more effective use of foreign experience in the study process;
§ To initiate and develop international scientific cooperation between academic staff and guest lecturers in the areas of specialization;
§ Improvement of the study programme in accordance with the development of the industry and the requirements of the labour market in the Baltic Sea region.

TREATS

§ Demographic and emigration trends (decreasing number of young people at the age of students). Relatively small number of students which limits the selection of the most motivated and ambitious students, lower solvency of potential students;
§ "Burnout" of the construction industry – further reduces students' motivation to spend time studying;
§ Mapping of the construction industry and adaptability of policies – the framework and regulation of the professions of the industry are unable to respond to the current needs;
§ Negative changes in the level of knowledge and skills of the secondary school students. Students' competencies at the beginning of studies influence the quality of studies;
§ Lack of long-term education policy in Latvia, including the policy related to the export of education;
§ Some public institutions have a debatable view of the quality of engineering, information technology and computer science study programmes and the possibilities of science development in the regional higher education institutions;
§ Insufficient amount of basic funding;
§ Impact of the pandemic on the higher education sector as a whole.

The field of study is developed based on the strengths that fundamentally form the student's main added values in studying architecture and construction field at Vidzeme University and mark the "unique selling point" of the study program proposal. In turn, the weaknesses will be improved by strengthening the brand awareness and recognition of the study field both in the Vidzeme region and in Latvia with the students' own references, involvement, feedback, suggestions and experience in the study process at Vidzeme University, as well as nourishing and building up qualitative relationships with cooperation partners - construction industry companies, industry organizations, policy makers and other higher education institutions in Latvia and internationally, promoting and purposefully working with research directions that are able to compete on the scale of the Baltic Sea region and Northern Europe.

The field of study at Vidzeme University has broad development opportunities both in Latvia and in the Baltic Sea region, the acquisition of possibilities largely depends on the ability to reinforce the brand awareness and recognition locally and state-wide of the study field and clearly position added value for

partners, potential students (including lifelong learners), lecturers and nourish the links in the region, Latvia and internationally that are formed based on strengths.

Regarding threats, it should be noted that the events of recent years have shown that the higher education institution must be able to adapt to any circumstances that might occur, and Vidzeme University, as a relatively solid and optimal size organization, has so far managed to cope with challenging situations presented. However, part of the threats arises from economic and construction sector policy events, incl. unresolved mapping of the construction industry, as well as the tense, turbulent economic situation in the construction sector, which has a significant impact on the well-being of students, creating a threat of "burnout" in the coming years and effecting admissions. In order to be able to follow the changes in the situation and to be able to identify the risks in relation to the development of the field of study as soon as possible, the representatives of Vidzeme University, incl. the director of the field actively participates in the work of the LDDK Construction Industry Council and tries to maintain constant communication and feedback with students and industry partners.

The development plan of the study field for years 2021-2027 is built up on the strengths, in order to reinforce the opportunities that will improve the weaknesses of the field of study and allow to be able to identify the risks posed by threats in a timely manner. The development plan of the study field also includes clear strategic goals of the study field and lists the objectives that will be performed to reach the goals stated.

The development plan provides the foundation for the implementation of the current study program at Vidzeme University and reveals the main values added of the study program for the Latvian construction sector as whole, as well as outlines the structure and methodology of the study program in providing truly quality education and provides insight into future expansion plans.

2.1.3. The structure of the management of the study field and the relevant study programmes, and the analysis and assessment of the efficiency thereof, including the assessment of the role of the head of the study field and the heads of the study programmes, their responsibilities, and the cooperation with other heads of the study programmes, as well as the assessment of the support by the administrative and technical staff of the higher education institution/ college provided within the study field.

The management of the study field is organized in such a way as to ensure continuous supervision of the quality of education, at the same time ensuring the independent operation of each study programme. The overall management of the study field is implemented centrally and is managed by the field director who directly reports to the Dean of the Faculty of Engineering. The director of the study field is responsible for the study programme “Construction of Wooden Houses and Eco-building”. Important decisions for the study field are made in close cooperation with the industry representatives who participate in the jointly organized meetings.

The following measures are implemented to ensure the quality of the study field:

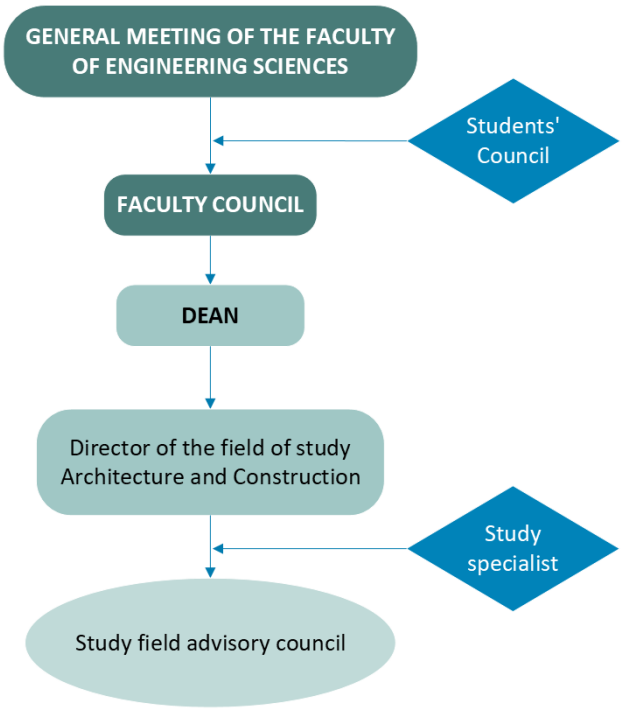
- Consultative Council of the study field – consists of 10 representatives, operates on the basis of the regulations;
- Strategic control – implemented by the director of the study programme, head of the field and the Assembly of the Faculty of Engineering;
- Administrative and accounting control is implemented by the Study Department;
- Discussing and analysing the self-assessment report of the study programme, admission results and academic progress, internship and State examination results – performed by the Assembly of the Faculty of Engineering and the Consultative Council of the study field;

- Discussing the results of the internship defence and State examinations with the members of the defence commission;
- Academic results, self-assessment reports, the quality of internship and qualification papers are discussed by the lecturers at the end of each semester session;
- Student survey focused on the quality of the study courses of the field, an in-person meeting of the director and students and a meeting with the student board.

Study process support functions are provided by:

- Administrative Department which is responsible for study administration, international cooperation administration, IT infrastructure coordination, ViA operational management and maintenance of the material and technical base, financial management and accounting, marketing and public relations, as well as for document management and their circulation.
- Library
- Rectorate
- Knowledge and Technology Centre (KTC) promoting knowledge and technology transfer, attracting project funding, fostering cooperation with entrepreneurs, and working in the field of lifelong learning.

Figure 1. Schematic management structure of the study field



Several structural units of ViA provide support for the implementation of the study programme of the field. The following is a detailed description of each structural unit and their tasks in the implementation of the study programmes.

Socio-Technical Systems Engineering Institute (SSII)

Institutes are research units that ensure a scientific function. These structural units can provide for employment of academic staff in the field of research in order to develop and improve their competencies in the field and the quality of studies.

ViA Socio-Technical Systems Engineering Institute was founded in July 2006 and is under the wing of the Faculty of Engineering and unites researchers from all fields represented in the faculty programmes – Wooden Houses and Eco-building; Logistics Information Systems and RFID Technologies; Business Process Modelling; Hybrid Simulation Modelling Systems; Use of Virtual and Augmented Reality in Training. In 2021, research directions were supplemented with the research themes of the study field

"Architecture and Construction" which are described in detail in Part II "Scientific Research and Artistic Creativity" of the report.

Institute of Social, Economic and Humanities Research

The Institute of Social, Economic and Humanities Research (hereinafter – HESPI) is a structural unit of ViA established by the decision of ViA Senate of 25 September 2013. HESPI is registered with the Register of Scientific Institutes of the Republic of Latvia on 28 November 2013. The main research directions of the Institute are as follows: sustainable development of the national economy, sustainable tourism, micro-niches in tourism, development of protected nature and cultural territories, cultural space and development of cultural identity sites, Latvian social security system, social investment, innovation management, science communication, online communication and online media, regional development (interaction between rural and urban environments).

ViA study process support functions are ensured by the **Administrative Department**. The main functions and tasks of the department are as follows: study administration, international cooperation administration, IT infrastructure coordination, ViA operational management, financial management and accounting, marketing and public relations, as well as document management and circulation, and internal communication. A detailed description of each function is given below.

Study administration: to plan, organize and administer study processes: student enrolment, planning of the academic year, planning of study places funded by the State budget, student registration, rotation, scholarships, reports to external cooperation partners; to ensure maintenance and development of the study information system; to manage and organize study record keeping and to ensure circulation, registration and archiving of study records; to maintain a database of graduates and conduct graduate surveys.

International Cooperation Administration: to organize ViA international activities in cooperation with academic and scientific vice-rectors and faculties; to ensure international mobility of ViA students, international students and staff; to establish and maintain ViA international cooperation partner network.

IT infrastructure coordination – systems, servers, computer networks, computers; to install and configure new hardware, including servers; to repair and maintain computer hardware; to equip ViA lecture-rooms with the equipment necessary for the study process; to ensure independent and qualitative operation of ViA computer network and to establish new connections to the existing computer network; to promote professional development of ViA staff in IT issues; to ensure protection of ViA information systems against third party intrusion.

ViA operational management and maintenance of the material and technical base: to maintain and repair electric power system, heating system, water and sewerage systems, ventilation and air conditioning systems, fire safety, alarm and notification systems; to ensure purchase and production of household items, equipment and furniture for ViA needs; to ensure record keeping, assembling and maintenance of inventory and furniture; to ensure cleaning and improvement of ViA buildings, premises and plots of land, including preparation of study premises for lectures; to ensure the operation of the hostel; to ensure compliance with the rules of procedure, labour protection requirements and ViA internal regulatory enactments in ViA buildings.

Financial management and accounting: to develop ViA draft budget and submit it to ViA Senate for approving; to control rational use of ViA's financial resources; to analyze ViA financial indicators; to keep record of the use of ViA funds in accordance with the approved estimates, as well as to keep record of liabilities and claims according to the laws and other regulatory enactments of the Republic of Latvia; to control the acquisition, use and management of material resources; to ensure organization and documentation of procurement procedures.

Marketing and public relations: to implement internal and external communication; to develop and implement the brand of ViA, marketing and PR strategy and operational plan; to coordinate ViA

marketing activities by cooperating with various ViA structural units, other public and municipal entities and private entrepreneurs; to organize and participate in ViA marketing events in Latvia and abroad.

Organizing ViA document management and circulation and ensuring internal communication: to organize and manage document circulation at ViA, ensuring record keeping, document registration, preparation of orders, powers of attorney, statements, drafts of outgoing documents; to provide support to ViA management and staff in record keeping matters; to archive documents.

Library

Main functions and tasks of the library:

to plan the development of the library stock;

to provide the ViA academic and scientific research process with media from the library collection and from libraries in Latvia and abroad through the interlibrary subscription; to store and systemise information on ViA history, in cooperation with the directors of the study fields and teaching staff to coordinate the provision of the academic process with library resources; to develop the library's stock in accordance with ViA academic and scientific work directions, the requirements of the study fields, by co-operating and coordinating resources in collaboration with Valmiera Library; to collect, systematize, catalogue, bibliographically process and preserve printed publications, electronic publications, manuscripts and other documents; to provide the library's collection, including availability of electronic databases for independent studies and research; to maintain and develop a database of author's works by ViA academic staff and students; to advise ViA academic staff and students on the use of informative resources.

Rectorate – rector, vice-rector for academic affairs and research, administrative vice-rector, assistant rector - scientific secretary, lawyer-HR specialist. Main functions and tasks of the rectorate: strategic management of ViA; ViA personnel management; legal aid; scientific management; project development, management and supervision.

Knowledge and Technology Centre (KTC)

Main functions and tasks of the KTC: to promote knowledge transfer, applied research and the development of ViA infrastructure through the funding of projects at regional, national and international level; to cooperate with the education service providers in Vidzeme region to ensure the accessibility and offer of the education to all target groups by bringing together the legal and natural persons involved in the adult education, promoting their activities and cooperation for achieving the goal of the KTC; to develop and maintain cooperation with other educational and scientific institutions of Vidzeme region by offering their services in the field of knowledge and technology transfer; to establish and maintain contacts with partners in the private, public and non-governmental sector and to promote feedback with ViA; to operate within the networks of the lifelong learning partners: higher education institutions, scientific institutions, entrepreneurs, associations, adult education centres and Alumni.

Within the framework of the KTC, it is planned to establish a contact point for the circular economy, wood and sustainable construction through which cooperation with representatives of the public and private sectors will be enlarged and training opportunities will be expanded in the future with individual courses for developing skills and improving knowledge for the people of the industry.

2.1.4. Description and assessment of the requirements and the system for the admission of students by specifying, inter alia, the regulatory framework of the admission procedures and requirements. The assessment of options for the students to have their study period, professional experience, and the previously acquired formal and non-formal education recognised within the study field by providing specific examples of the application of these procedures.

Admission criteria to ViA study programmes are approved by ViA Senate which, in accordance with the Law on Higher Education Institutions of the Republic of Latvia, approves admission requirements to ViA undergraduate and postgraduate programmes by November 1. Upon applying for admission to the undergraduate programmes, the applicant or his/her authorized representative should complete an application and present a passport or ID card, a certificate of secondary education, certificates of centralized examinations specified in the admission regulations, documents permitting admission beyond competition if a specific criterion is laid down in the regulations *(see Annex 7).*

Upon applying for postgraduate programmes, the applicant or his/her authorized representative should fill in an application and present a passport or ID card, a document of higher education, as well as documents specified in the programme requirements *(see Annex 7).*

International applicants should additionally present a certificate of English proficiency in internationally recognized examinations TOEFL (minimum 500 points for the test taken on-the-spot and 70 points for the online test), IELTS (minimum 6.0 points) or other evidence of English language proficiency. If previous education is acquired in English, evidence of English language proficiency is not required. In addition, a statement from the Latvian Academic Information Centre on the compliance of the education obtained abroad with the requirements of the admission regulations should be submitted.

It is possible to apply for the undergraduate studies at ViA electronically in the Information System of Unified Admission to Undergraduate Programmes *(VUPP IS)* through the e-service on the portal *www.latvija.lv*. It is possible to apply for the postgraduate study programmes, using ViA electronic questionnaire *magistri.va.lv*, while applications for the doctoral programme are accepted in person or electronically, if the application is signed by a secure electronic signature.

In accordance with the Cabinet Regulation No. 932, it is possible to start studies at ViA at a later study stages, subject to the requirements of the regulation regarding the mandatory amount of credit points, which is equalized to the content of ViA study programmes. Recognition of study results obtained in previous education is a regular procedure for any student who has started studies at a later stage and who, in accordance with international cooperation agreements, studied one to two semesters at a higher education institution abroad. In this case, the equalization of study results is performed by the director of the study programme when the student has submitted supporting documents (academic statement or diploma with a diploma supplement for previously obtained higher education). The equalization of the study results with the study results obtained within the framework of the international exchange programme is performed on the basis of the higher education institution cooperation agreement, the tripartite study agreement *(Erasmus learning agreement)* and the certificate on the acquired study courses.

In accordance with the Cabinet Regulation No. 505, every person has the right to submit an application to ViA for recognition of knowledge, skills and competences acquired in previous education or professional experience in the study programme implemented by the higher education institution or part thereof. Information on the possibilities of recognizing non-formal education or professional experience is available on the ViA website (latvian only). Study results achieved by the person while studying (a student has been matriculated) in the study programme are recognized in accordance with the Cabinet Regulation No. 932 of 16 November 2004 “Procedure for Starting Studies in Later Studies”.

The decision on the recognition of knowledge, skills and competencies acquired outside formal education or acquired through professional experience, as well as on the study results achieved in previous education is made by the Study Results Recognition Commission established by ViA. In accordance with the Regulations on the recognition of competences acquired outside formal education or through professional experience and on the recognition of study results achieved in previous education *(see Annex 8),* a person must submit an application for recognition of knowledge, skills and competences. The procedure for the recognition of study results is described in the above-mentioned regulations.

Information of ViA study fields and study programmes is published on ViA website https://va.lv/lv. ViA Administrative Department (Marketing Group and Study Administration Group) is responsible for publishing the information.

Refer to the annex for ViA Admission Rules (see Annex 7).

Refer to the annex for ViA Regulations on the recognition of competences acquired outside formal education or through professional experience and on the recognition of study results achieved in previous education (see Annex 8).

Lifelong learning opportunities through the Open University

The service **Open University** of ViA Knowledge and Technology Centre (KTC) (https://ztc.va.lv/lv/atverta_universitate) offers everyone an opportunity to apply for one of the study courses at Vidzeme University of Applied sciences. It is an opportunity, on the basis of previously acquired education, to acquire the knowledge and skills offered by ViA study programmes. For those ViA students who can not continue their studies due to academic or financial debts, this is an opportunity to maintain a connection with the higher education institution and continue their studies according to their abilities.

The Open University is an opportunity not only to fully master the content of the course, take examinations and receive an assessment in the chosen course like any ViA student, but also to get involved and understand the life of students and the environment of the higher education institution, and to receive a ViA certificate after successful completion of the course.

The certificate issued by ViA's KTC includes an indication that credit points corresponding to the study course have been obtained. In accordance with the Cabinet Regulation "Regarding Recognition of the Study Results Achieved in Previous Education or through Professional Experience", a holder of such a certificate may apply to any higher education institution or college of Latvia requesting to recognize the knowledge, skills and competence acquired while studying the particular course.

Course participants have free access to ViA library materials, databases, computer classes and other resources that facilitate and make the learning process easier.

2.1.5. Assessment of the methods and procedures for the evaluation of students' achievements, as well as the principles of their selection and the analysis of the compliance of the evaluation methods and procedures with the aims of the study programmes and the needs of the students.

ViA Senate has approved the Study Regulations which lay down the procedure for the implementation of study programmes, the rights and obligations of students, the procedure for financing studies and the general procedure for organizing State examinations. The Study Regulations lay down criteria, forms and terms for the assessment of students' knowledge, conditions regarding academic debts, and other requirements for achieving learning outcomes. Descriptions of the study courses and other programme components define requirements for the commencement of studies, goals and planned learning outcomes, outline the content necessary for achieving learning outcomes, a study calendar, compulsory and additional literature, and other sources of information, describe the organization and tasks of students' independent work, define criteria for assessing learning outcomes.

Criteria, conditions and methods published in the course descriptions are used to assess the academic progress of students, and they are applied consistently. To provide guidelines for the procedure of writing and defending annual projects and graduation papers, the following document is prepared and

approved: **Guide** for Preparation Study Projects and Graduation Papers. The composition of the State Examination Commission is approved by the Assembly of the Faculty; specialists/experts of the field are included in the commission and they act in accordance with the methodological guidelines for preparation of the graduation papers. Internships within the study programmes are regulated by the **Internship Regulations** which lay down the process of internship, conditions for preparation and defence of reports.

The diversity of student needs is respected during the study process at ViA by choosing appropriate learning approaches. ViA uses innovative teaching methods and implements an individual approach. Study programme directors make sure that the lecturers involved in the implementation of the programme are familiar with the methods of assessing learning outcomes and receive support for the development of their skills in this area; assessment criteria and methods, as well as evaluation criteria are made public in advance; an assessment provides for a possibility to show the extent to which students have achieved learning outcomes; students receive feedback from the lecturers who provide advice on the study and research process, if necessary; assessment is consistent, fair to all students and is carried out in accordance with the approved course descriptions. Appropriate procedures – ViA **Study Regulations** and the **Regulations of Ethics** – are in place for resolving student complaints.

Students may read academic progress evaluation criteria, conditions and binding procedures on the learning environment ***moodle.va.lv***.

Refer to the annex for ViA Study Regulations (see Annex 9).

Refer to the annex for ViA Regulations of Ethics and the Ethics Violation Scheme (see Annex 10).

ViA study programme course descriptions, Internship Regulations and methodological guidelines for writing papers can be found after the description of each study programme.

2.1.6. Description and assessment of the academic integrity principles, the mechanisms for compliance with these principles, and the way in which the stakeholders are informed. Specify the plagiarism detection tools used by providing examples of the use of these tools and mechanisms.

The principles of academic integrity are laid down in the ViA Regulations of Ethics approved on 26 April 2017 at the ViA Senate meeting.

The Regulations of Ethics define the basic principles and norms that ViA personnel (students, academic and general staff) must observe in their attitude towards ViA, in their work, in their relations with other ViA representatives and society.

The Regulations of Ethics also include a section on academic and research ethics stating that ViA staff treats the study and research process and personnel involved therein with integrity. In academic and scientific research, the staff complies with copyright, respects intellectual property, honours work results of others, and guarantees the truthfulness of the data used and analysis performed in research.

In order to promote the observance of academic and research ethics at Vidzeme University of Applied Sciences, the following principles must be adhered to: integrity, openness, objectivity, unambiguity, observance of the rights of research participants, independence from sponsors, the contribution to research by all involved persons must be acknowledged.

The Regulations of Ethics list the types of violations of academic and research ethics indicating that

plagiarism, falsification, the use of unauthorized sources and ways of obtaining information during examinations (exams, tests), re-submission of one's own work to another study course without a prior agreement with the lecturer, as well as any other deliberate engagement in the activities that hinder or interfere with the study process and academic work at the institution of higher education, including participation in or concealment of violations of academic ethics shall be deemed to be a violation of academic ethics. Furthermore, the following is considered to be a violation of research ethics: violations of requirements of research ethics specified in the professional codes; allowing conflicts of interest; data falsification; tendentious data analysis and interpretation; discrimination of research participants; disregard of voluntary participation in research; disregard of participant anonymity or confidentiality (as appropriate), except the cases when these issues are harmonized with research participants or data are collected in public environment (for example, observation in public environment); violation of informed consent, unless it is a simple observation in a public place and the audio or video recording is not used in a way allowing identification of or harm to a person; misleading or failure to inform the subjects of the research on the purposes or significant aspects of the research, unless it is not possible to use other effective alternative methods; misleading society without providing complete information; plagiarism and self-plagiarism, i.e., failure to refer to previously published data or discoveries; use of data collected by other researchers without a reference to the contribution of other authors.

The regulations also clearly define the sanctions for ethical violations, as well as the procedure for identifying violations and imposing sanctions.

Sanctions for the violations of research ethics may be initiated by the Academic Ethics Commission. Sanctions for the violation of the norms of academic ethics may be imposed on the students by a lecturer or the Rector in accordance with the decision of the Academic Ethics Commission. Sanctions for the violations of the norms of academic ethics may be imposed on academic and general staff by the Rector in accordance with the decision of the Academic Commission. Sanctions for the violations of general ethical principles may be imposed on the general staff (including academic staff if the violation is not related to academic work) by the employee's immediate supervisor or Rector.

Starting from 2017, ViA has entered into the agreement with the University of Latvia on the use of the *Unified Computerized Plagiarism Control System*, one of the most essential anti-plagiarism tools at ViA. According to the order which is issued every semester regarding submission of the graduation papers (including the Qualification papers), students have to upload their papers to the study information system LAIS which is synchronized with the plagiarism control system. In situations where a lecturer has suspects regarding student's paper, the plagiarism control system is also used to check course papers or annual projects. In 2018, by the help of this system, a case of plagiarism in the development of the Qualification paper was detected, as a result of which the student wrote the paper repeatedly in the next academic year.

Refer to the annex for ViA Regulations of Ethics and the Ethics Violation Scheme (see Annex 10).

2.2. Efficiency of the Internal Quality Assurance System

2.2.1. Assessment of the efficiency of the internal quality assurance system within the study field by specifying the measures undertaken to achieve the aims and outcomes of the study programmes and to ensure continuous improvement, development, and efficient performance of the study field and the relevant study programmes.

Vidzeme University of Applied Sciences has developed the Study Quality Assurance Policy and approved it on 31 January 2020 at the Senate meeting. It is part of the quality management system that promotes ViA's internal quality culture and its continuous improvement. The study quality assurance policy has been developed, reviewed and implemented in accordance with the Standards and Guidelines for Quality Assurance in the European Higher Education Area, the Law on Higher Education Institutions of the Republic of Latvia and other regulatory enactments, while taking into account the view and needs of ViA's internal and external stakeholders. The policy supports the development of a quality culture in which all internal stakeholders take responsibility for the quality and engage in the quality assurance at all levels.

ViA has an internal quality assurance system, quality management processes are integrated in all ViA processes.

Heads of the study fields and programme directors, assemblies of faculties, vice-rectors, the student self-government, and the Senate are involved in ensuring internal quality. The above institutions comprehensively assess the new study fields and programmes and changes thereto, annual self-assessment reports of the study fields.

Internal quality assurance activities of the study process take place at the level of ViA administration, study fields and study programmes. At the level of the study field, the internal quality is ensured by the assembly of the Faculty of Engineering, the head of the study field and the programme director, the student self-government. Every year a student survey is organized asking them to assess the organization of the study process, the quality of the work of the study field director, the programme director and the lecturer.

In accordance with the Study Quality Assurance Policy, ViA implements the following activities to monitor the quality of academic performance:

- At the end of each study course a student survey is organized and a result summary is sent to the lecturer and the head of the study field;
- Once a year a lecturer's classes are attended by a colleague who afterwards provides feedback. Once a year a lecturer attends a class of his or her colleague;
- At the end of the academic year, the lecturer summarizes the findings of the study course assessments and the experience obtained while observing classes, and writes a summary of his or her academic performance which is discussed with the head of the study field. If the lecturers want, their academic performance is discussed at the meeting of the study council;
- If the head of the study field finds long-standing or serious problems in the academic performance of the lecturer, the necessary professional development measures are discussed with the lecturer, including a possibility to assign a mentor or consultant of the lecturer's choice. If the professional development does not give a positive result, the head of the study field turns to the dean to jointly address this issue.

At the end of each study semester, the director of the study programme has a meeting with the students of each course, during the meeting students are invited to express their views on studies at ViA in general, the quality of the study programme and its courses, lecturers' teaching methodology, and recommendations on the aspects of the programme which, according to the students, should be improved. During the meeting, discussions are recorded in writing and afterwards discussed with the dean. Upon assessing students' feedback on the study process and recommendations for its improvement, persons responsible for the improvement of the process are appointed and the necessary adjustments are made in the implementation of the study programmes.

A student survey is organized at the end of each study course. Its purpose is to maintain the quality control of studies, identify problems and offer solutions. By filling in the questionnaires, students provide an assessment both of the course as a whole and of its lecturer. Course evaluation includes the following: questions about the course topics and their relevance, usefulness of the acquired knowledge

and skills, assessment of the importance of lectures, practical work and independent work, opportunities to consult the lecturer, assessment of technical support, as well as there is a possibility to provide free-form recommendations for course improvement. Students are asked to assess lecturer's work including questions about lecturer's professional competence, lecturer's skills to rouse interest in the study course, ability to link theory with practice, work organization skills, attitude towards students, etc. Open-ended questions allow students to make suggestions, point out to lecturer's strengths/weaknesses and issues which require more attention.

ViA regularly promotes employee education and development of professional skills by supporting employee participation in various local and international courses, seminars, conferences, and experience exchange programmes.

The director of the study programme has regular online meetings with the teaching staff; students are informed through short newsletters in a video format.

During the reporting period, the Rector initiated an additional programme quality assessment "Evaluation of the quality and sustainability of the ViA study field "Architecture and Construction" and the study programme "Construction of Wooden Houses and Eco-building" (2019) by an independent group of experts. The recommendations provided were implemented in the study programme in the current academic year and were fundamentally taken into account when updating the content and structure of the programme for re-accreditation.

Refer to the annex for the Evaluation of the quality and sustainability of the ViA study field "Architecture and Construction" and the study programme "Construction of Wooden Houses and Eco-building" conducted by an independent expert commission in 2019 (see Annex 11, Latvian only).

2.2.2. Analysis and assessment of the system and the procedures for the development and review of the study programmes by providing specific examples of the review of the study programmes, the aims, and regularity, as well as the stakeholders and their responsibilities. If, during the reporting period, new study programmes have been developed within the study field, describe the procedures of their development (including the process of the approval of study programmes).

Vidzeme University of Applied Sciences has developed the procedure for study programme developing, approving and monitoring. This procedure lays down guidelines for the development, approval, monitoring and updating of the study programmes, lifelong learning courses and other curricula and components thereof. The programmes and components thereof are elaborated to meet the objectives set, which, in turn, are in line with the ViA strategy. Programmes are developed using the vision of external stakeholders in such a way to meet the defined learning outcomes according to the Latvian and European Qualifications Framework, and to promote higher education goals – personal growth and employment, civil society and an expanded knowledge base.

Audit of the course descriptions of the study programme: course descriptions are updated and improved every year at the beginning of the academic year. The assessment of the study programme content and the evaluation of the quality of their implementation are based on the self-assessment reports, regular student surveys of the study course and lecturer performance, feedback from internship supervisors within the industry, graduate surveys, employer surveys of ViA graduates, suggestions of the Advisory Board, as well as on the opinions and recommendations of industry experts.

A student survey is organized at the end of each study course. Its purpose is to maintain the quality

control of studies, identify problems and offer solutions through a dialogue between students and lecturers. By filling in the questionnaires, students provide an assessment both of the course as a whole and of its lecturer. Course evaluation includes the following: questions about the course topics and their relevance, usefulness of the acquired knowledge and skills, assessment of the importance of lectures, practical work and independent work, opportunities to consult the lecturer, assessment of technical support, as well as there is a possibility to provide free-form recommendations for course improvement. Students are asked to assess lecturer's work including lecturer's professional competence, lecturer's skills to rouse interest in the study course, ability to link theory with practice, work organization skills, attitude towards students, etc. Open-ended questions allow students to make suggestions, point out to lecturer's strengths/weaknesses and issues which require more attention.

A graduate survey is also organized every year to find out the satisfaction of graduates with the quality of studies. In general, within the framework of the field programmes, the employment of graduates after graduation is high proving the market demand for qualified specialists.

The study quality assurance policy document is available on the ViA website: https://va.lv/sites/default/files/5P-ViA_Studiju-kvalitates-nodrosinasanas-politika-APST-31012020-ENG.pdf

2.2.3. Description of the procedures and/or systems according to which the students are expected to submit complaints and proposals (except for the surveys to be conducted among the students). Specify whether and how the students have access to the information on the possibilities to submit complaints and proposals and how the outcomes of the examination of the complaints and proposals and the improvements of the study field and the relevant study programmes are communicated by providing the respective examples.

ViA students have the opportunity to express their opinion, recommendations, reprimands about the content of the study program, course, quality, and teaching staff at all levels of ViA management. The value of the university is openness and accessibility at all levels and cooperation with students.

At least once a month, the director of the study field sends out a newsletter to students, in which they are once again encouraged to express an opinion, provide recommendations for improving the study program to increase students' interest and involvement, and provide feedback. Constant feedback is provided through the MS Teams chat for each study course. The main contact person for students in case of complaints is the director of the study field. The main issues discussed were related to the organization of the distance learning process during the pandemic, timely publication of study materials in the learning environment, etc. students' proposals on the implementation and planning of the study process.

The self-evaluation reports of the study field and the study program are prepared every year together with the advisory council, which is later approved by the Council of the Faculty of Engineering and the Senate.

Once (2018/2019 academic year), a student of the program has been a member of the Board of the Vidzeme University Student Association, representing the rights of students at the university level. The ViA Student Board has a monthly meeting with the ViA management, where current topics and students' proposals for identified problems are discussed. For example, in the previous period, the issues to be considered were mainly related to the situation caused by the pandemic and the process of organizing

studies. In turn, during the last meeting, topical issues were discussed about the situation in Ukraine, some issues/challenges regarding the daily life of students in service hotels, as well as issues related to the organization of the joint clean-up.

2.2.4. Provide information on the mechanism for collecting the statistical data, as developed by the higher education institution/ college. Specify the type of data to be collected, the regularity of collection, and the way the information is used to improve the study field. Describe the mechanism for obtaining and providing feedback, including with regard to the work with the students, graduates, and employers.

Various student profile data and student number statistics are used to make decisions about the development and improvement of the programmes of the study field. Statistical reports are compiled as necessary, distinguishing between mandatory (in accordance with the Cabinet regulations) and optional statistics (as needed); the information to be collected is analysed according to the purpose stated in the decision. Statistical data reports on applicants, the number of students and graduates are prepared on a regular basis.

Table 2. *Types of statistical data reports compiled by ViA*

Type of statistics	*Regularity*	*Profile (upon request)*	*Necessity*	*Statistics are compiled by*
Applicants	After each admission and upon request	Number of applicants Place of residence Educational institution Number of applications Admission competition Funding etc.	Admission analysis Admission planning Planning of marketing activities Improvement of the programme Planning of budget places Self-assessment reports, etc.	Study administration group
Students	Each month and upon request	Number of students Funding Average and weighted grades Drop-out etc.	Improvement of the programme Planning of budget places Self-assessment reports Rotation Scholarships, etc.	Study administration group
Graduates	After graduation and upon request	Number of graduates Funding Average and weighted grades Topics of graduation papers	Improvement of the programme Planning of budget places Self-assessment evaluation reports, etc.	Study administration group

Surveys of applicants, students and graduates are an important source of information for the improvement of programmes of the study field. On the basis of the applicant surveys, it was decided to improve marketing activities, for example, by launching individual activities for college programme students in the summer of 2019 because the overall direction of ViA marketing campaigns was focused on attracting undergraduate students.

Student surveys at the end of each study course allow the lecturer to assess the course and results achieved, as well as student satisfaction. The director of the study field controls the quality of the course and initiates changes if necessary (for example, to change the lecturer, to update the content of the course, to change the amount of the course in terms of credit points, to change the course time in the

study programme plan, etc.). Problem issues are discussed at the stages planned for ensuring the quality of the study programme. Based on the assessment provided by the students, for example, the lecturers have been changed for the courses related to practical studies in geodesy, spatial planning, building mechanics, and construction technologies.

At the end of each study semester, a student survey is organized. Its purpose is to get feedback from students about the study process, lecturer performance, as well as, if necessary, to identify problems and offer solutions, guaranteeing the quality control of studies.

At the end of each course, students fill in a questionnaire evaluating both the course and its lecturer. The questionnaire includes the following: questions about the course topics and their relevance, usefulness of the skills and knowledge acquired, assessment of the importance of lectures, practical work and independent work, lecturer availability (consultations, responsiveness), assessment of technical assets, as well as there is a possibility to provide free-form recommendations for course improvement.

A section on the evaluation of the lecturer's performance provides for a possibility for the students to evaluate the lecturer's professional competence, his or her skills to rouse interest in the study course, ability to link theory with practice, work organization skills, attitude towards students, etc.

Students responses allow to evaluate the course, its content and the lecturer's cooperation with the students. Open-ended questions, in their turn, reveal lecturer's strengths/weaknesses and issues which require more attention. Students appreciate practical work and discussions within the study courses.

In general, the total evaluation of study courses varies in the range from 3.5 to 5 points (where 5 is the maximum number of points). The average assessment of all courses is 4.3 points indicating high student satisfaction with the overall quality of studies.

To improve the quality of studies, in 2021 a new content of the student course assessment questionnaire was developed and work on a new student registration procedure has been started, providing that the student may make registration for studies in the next semester by completing all the study course assessment questionnaires of the respective semester. To ensure the new procedure, improvement and programming works of the Study Information System (LAIS) have been commenced for ensuring feedback of students on the content of study programmes, organization, material and informative provision, support system for students, etc. aspects of internal quality assurance of the study programme, because of which it would be possible to provide relevant proposals for improvement of the study programme.

ViA regularly conducts surveys of graduates (9 months after graduation), which is absolutely a challenge for ViA, to make sure that graduates participate in surveys. In 2020, only 31 % of the graduates surveyed responded. All respondents have successfully entered the labor market (100 % employment). This could be one of the indicators that points out that the knowledge provided in the study programmes is of sufficient quality and practically relevant to the labour market.

Additional changes have been introduced in the renewed study programme based on data assessment, formal and informal meetings with industry entrepreneurs and the internal quality system.

Graduates and employers participate in the work of the consultative council of the study field both formally and informally; they are also present at the defence of internship reports and qualification papers providing their recommendations for improving the study process and internship, thus continuously ensuring the improvement of the quality of studies and connection with the needs of the industry.

Refer to the annex for the analysis of the results of the surveys of students, graduates and employers (see Annex 12).

2.2.5. Specify the websites (e.g., the homepage) on which the information on the study field and the relevant study programmes is published (in all languages in which the study programmes are implemented) by indicating the persons responsible for the compliance of the information available on the website with the information published in the official registers (State Education Information System (VIIS), E-platform).

Information about ViA study fields and study programmes is published on ViA website *www.va.lv*. ViA Administrative Department (Marketing Group and Study Administration Group) is responsible for publishing information.

2.3. Resources and Provision of the Study Field

2.3.1. Provide information on the system developed by the higher education institution/ college for determining and redistribution of the financial resources required for the implementation of the study field and the relevant study programmes. Provide data on the available funding for the scientific research and/or artistic creation activities, its sources and its use for the development of the study field.

Table 3. Financial resources for the implementation of the study programmes relevant to the study field in the reporting period 2013-2020

Funding	2014, EUR	2015, EUR	2016, EUR	2017, EUR	2018, EUR	2019, EUR	2020, EUR	2021, EUR
State budget funding for the field (without scholarship funding)	38 581	38 576	46 303	92 905	96 699	101 458	70 545	75 187
Own income – study field tuition fees	7 105	19 901	7 718	1 647	277	3 018	3 312	1 785
Funding, total	**45 686**	**58 477**	**54 021**	**94 552**	**96 976**	**104 476**	**73 857**	**76 972**

Table 4. Funding for research (creative) activities of the academic staff. Funding for research activities at Vidzeme University of Applied Sciences is not divided by study fields, but is directed to scientific institutes, grant programmes, research projects and commissioned works in which academic staff from different study fields works.

Funding	2014, EUR	2015, EUR	2016, EUR	2017, EUR	2018, EUR	2019, EUR	2020, EUR	2021, EUR

Base funding for science	36 498	42 084	13 222	124 321	142 725	147 790	152 575	159 639
Funding for the State research programmes		9 453	56 119	82 811		325 099	471 050	126 430
Funding for research grants allocated by Valmiera city municipality	22 500	22 500	20 000	20 000	20 000	15 000		
Performance funding		19 743	24 514	122 192	150 240	181 806	197 011	191 713
Other income from the State budget			97 095	61 046	25 951	132 586	301 117	203 546
EU Structural Funds	19 209			510 796	534 951	295 163	288 424	731 716
Grants and programmes of the Latvian Council of Science		1 500					22 953	199 326
Income from contracts with legal entities of the Republic of Latvia	3 699	4 658	36 200	5 785	101 209	86 257	87 830	87 091
Other income for research activities		1 900		2 180		696		232
Income from foreign financial assistance	29 898	32 177	20 372	28 756	111 259	337 613	677 204	229 963
Funding, total	**111 804**	**134 015**	**267 522**	**957 887**	**1 086 335**	**1 522 010**	**2 198 164**	**1 929 656**

Table 5. Funding for student self-government Funding for student self-government is provided in the amount of at least one-twentieth of the State funding for the study process and tuition fees.

Funding	**2014, EUR**	**2015, EUR**	**2016, EUR**	**2017, EUR**	**2018, EUR**	**2019, EUR**	**2020, EUR**	**2021, EUR**
Funding for student self-government	**7 413**	**6 958**	**6 958**	**7 173**	**7 470**	**7 470**	**7 470**	**7 961**
State funding for the study process	*941 796*	*941 796*	*966 643*	*1 138 395*	*1 236 054*	*1 276 531*	*1 324 947*	*1 361 475*
Income from tuition fees	*454 301*	*435 766*	*381 154*	*261 350*	*205 191*	*179 537*	*185 539*	*151 835*
Total income from the study process	**1 396 097**	**1 377 562**	**1 347 797**	**1 399 745**	**1 441 245**	**1 456 068**	**1 510 486**	**1 513 310**
Student selfgovernment funding ratio, %	*0.53*	*0.51*	*0.52*	*0.51*	*0.52*	*0.51*	*0.50*	*0.53*

Table 6. Compliance of the remuneration of the academic staff with the regulations on the remuneration of teachers in the reporting period

Position	**2014, EUR**				**2015, EUR**			
	Monthly salary rate *	Minimum hourly rate **	ViA hourly rate ***	Compliance	Monthly salary rate *	Minimum hourly rate **	ViA hourly rate ***	Compliance
Professor	1175.29	11.75	12.54	complies	1175.29	11.75	12.54	complies

Associated professor	940.52	9.41	10.03	complies	940.52	9.41	10.03	complies
Assistant professor	752.7	7.53	8.02	complies	752.7	7.53	8.02	complies
Lecturer	601.87	6.02	6.42	complies	601.87	6.02	6.42	complies
Assistant	480.93	4.81	5.14	complies	480.93	4.81	5.14	complies

Position	**2016, EUR**				**2017, EUR**			
	Monthly salary rate *	Minimum hourly rate **	ViA hourly rate ***	Compliance	Monthly salary rate *	Minimum hourly rate **	ViA hourly rate ***	Compliance
Professor	1175.29	11.75	12.54	complies	1293.53	12.94	13.17	complies
Associated professor	940.52	9.41	10.03	complies	1035.35	10.35	10.53	complies
Assistant professor	752.7	7.53	8.02	complies	828.47	8.28	8.42	complies
Lecturer	601.87	6.02	6.42	complies	662.91	6.63	6.74	complies
Assistant	480.93	4.81	5.14	atbilst	528.95	5.29	5.4	complies

Position	**2018, EUR**				**2019, EUR**			
	Monthly salary rate *	Minimum hourly rate **	ViA hourly rate ***	Compliance	Monthly salary rate *	Minimum hourly rate **	ViA hourly rate ***	Compliance
Professor	1411.76	14.12	14.49	complies	1530	15.30	15.36	complies
Associated professor	1130.17	11.3	11.58	complies	1225	12.25	12.27	complies
Assistant professor	904.23	9.04	9.26	complies	980	9.80	9.82	complies
Lecturer	723.96	7.24	7.41	complies	785	7.85	7.85	complies
Assistant	576.98	5.77	5.94	complies	625	6.25	6.30	complies

Position	**2020, EUR**			
	Monthly salary rate *	Minimum hourly rate **	ViA hourly rate ***	Compliance
Professor	1569.00	15.69	15.69	complies
Associated professor	1256.00	12.56	12.56	complies
Assistant professor	1005.00	10.05	10.05	complies
Lecturer	805.00	8.05	8.05	complies
Assistant	641.00	6.41	6.41	complies

2021, EUR

Monthly salary rate *	Minimum hourly rate **	ViA hourly rate ***	Compliance
1754.00	17.54	17.54	atbilst
1404.00	14.04	14.04	atbilst
1124.00	11.24	11.24	atbilst
900.00	9.00	9.00	atbilst
717.00	7.17	7.17	atbilst

* - Cabinet Regulations No. 445 “Regulations Regarding Remuneration of Teachers”

** - calculated taking into account the maximum workload of academic staff – 1000 hours per year (100 hours per month) laid down in the Cabinet Regulations No. 445 “Regulations Regarding Remuneration of Teachers”

*** - approved at the ViA Senate meeting

Calculation of the study programme costs

Vidzeme University of Applied Sciences applies its own calculation methodology to calculate student costs, according to which costs are classified as follows:

1.1. Direct costs – direct costs of the study programme implementation:

1.1.1. academic staff remuneration,

1.1.2. costs of teaching materials, events,

1.1.3. other direct costs related to the implementation of the study programme.

1.2. Semi-direct costs – direct costs of the study field and faculty:

1.2.1. remuneration for academic staff which is not directly related to the implementation of a study programme (e.g., remuneration for scientific work of faculty lecturers),

1.2.2. costs of administrative work of the study field and faculty (remuneration for dean, head of the study field, senior specialist),

1.2.3. other administrative costs of the study field and the faculty (costs of faculty staff business trips, costs of training, attending conferences, membership fees, costs of stationery, hospitality and other expenses),

1.2.4. development expenses (usage of funding directly intended for the development of the faculty or study field),

1.2.5. cost carrier – the number of students per faculty (for transfer of direct costs of the faculty) or the number of students per study field (for transfer of direct costs of the study field).

1.3. Indirect costs – other costs of ViA:

1.3.1. remuneration (remuneration for administrative, general and economic staff),

1.3.2. administrative costs (expenses for business trips, total expenses for study process organization, technology expenses, library expenses, marketing, public relations and event organization expenses, other administrative expenses),

1.3.3. costs of building management (costs of infrastructure maintenance and operation),

1.3.4. costs of loan repayment,

1.3.5. capital expenditure (books, equipment),

1.3.6. cost carrier – the number of students per programme (for transfer of remuneration, administrative and capital costs) or the number of contact hours of the study courses implemented within the study programme per year (for transfer of building management costs).

Information on costs per student indicates items included in the cost calculation and distribution of funding (in percentage) between the items specified.

Table 7. Distribution of funding between the defined positions during the reporting period.

	2014	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**
	%	**%**	**%**	**%**	**%**	**%**	**%**	**%**
Direct costs								
Costs of academic and scientific work (study process)	33.1	38.8	37.9	39	37.5	41.4	31.7	40.9
Other costs of the study process	3.6	3.1	2.3	0.6	0	0.3	0	1.4
Semi-direct costs (transfer of the direct costs of the study field, faculty)								
Remuneration for scientific work (academic leave + scientific work)	5.1	0.8	3.4	1.2	0.5	1.1	0.9	0.6
Administrative work	8.4	8.4	8.1	9.4	11.6	12.5	17.5	14.7
Other administrative costs	1	0.6	1.9	1.4	0.3	1.8	0.7	1.3
Total direct costs *(direct + semi-direct)*	**51.2**	**51.7**	**53.6**	**51.6**	**49.9**	**57.1**	**50.8**	**58.9**
Indirect costs (transfer of other ViA costs)	**48.8**	**48.3**	**46.4**	**48.4**	**50.1**	**42.9**	**49.2**	**41.1**
Remuneration	29.7	27	25	26.4	29.8	24.5	30.8	23.9

Other administrative expenses	10	7.2	9.6	9	9.2	7.8	9.4	7.3
Loan repayment (including, interest payments)	1	2.2	2.3	2.1	1.8	1.4	1.8	1.4
Capital expenditure	1.5	0.8	0.5	0.8	0.9	0.8	0.7	0.8
Costs of building management	6.6	11.1	9	10.1	8.4	8.4	6.5	7.7
Costs per 1 student	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**

Control and sustainability of the use of financial resources

Control and sustainability of the use of financial resources are laid down in the procedure of development, approval, execution and control of the budget of Vidzeme University of Applied Sciences (approved on 26 October 2011 at the ViA Senate meeting, decision No. 10/7.1)

2.3.2. Provide information on the infrastructure and the material and technical provisions required for the implementation of the study field and the relevant study programmes. Specify whether the required provision is available to the higher education institution/ college, available to the students, and the teaching staff.

Material and technical base

ViA has two buildings in Valmiera, at Cēsu Street 4 and Tērbatas Street 10 for the study process, scientific, research and administrative activities with the total area of 71312 m^2, of which 2387 m^2 are used directly for the study and research process. The current study base consists of 38 lecture-rooms (total area of 1445 m^2), incl., 3 computer classrooms with 90 workstations and the Internet connection (195 m^2) and 9 laboratories – Energy Efficiency Laboratory, Construction Laboratory, Computer Network Laboratory, Multimedia Laboratory, VR/AR Laboratory, Electric Engineering Laboratory, RFID Laboratory, Mechatronics Laboratory and Mobile Technology Laboratory (total area of 324 m^2). All computers are connected to the common network ensuring a unified circulation of information, as well as there is an access to the Internet and databases. A conference room (257 m^2) is also used in the study process. There are also rooms for group work and individual studies (350 m^2) in the study blocks.

The Laboratory of Construction and Energy Efficiency is directly related to the implementation of the study programme.

Name of the laboratory: Energy Efficiency Laboratory

Room No.: T005

Brief description: Laboratory equipment can be used to assess the energy efficiency of buildings and materials, as well as to perform long-term energy efficiency modelling.

Equipment list:

1. Computer software for long-term energy efficiency modelling

2. Surface moisture meter
3. Air flow and flue gas meter (a set)
4. Thermograph
5. Laser temperature meter
6. Thermal image camera
7. Electronic scales
8. CO2, temperature and humidity loggers
9. Locksmith’s workbenches

Name of the laboratory: Construction laboratory

Room No.: T211

Short description: Laboratory equipment provides for a possibility to measure materials, buildings, to assess the quality of construction work.

Equipment list:

1. Infrared thermometer
2. Dynamometer wrench for checking tightened bolts
3. Moisture detector on the surface and in depth
4. Crack detection microscope
5. Laser rangefinder (4 pcs.)
6. Beldornii penetrometer
7. Wire finder
8. Pundit PL-200, Ultrasonic tester, Proceq
9. Profometer PM600, concrete protective layer and reinforcement diameter meter, Proceq
10. Universal loading machine 50ST

The material and technical base of the construction laboratory is supplemented by the opportunities offered by cooperation partners, for example, 3D Engineering provides students with access to several types of the latest generation laser scanners FARO Focus S150, Focus S120 and manual laser scanners.

Students can also use other available laboratories if necessary and if the specificity of the course requires so.

Electronics laboratory – laboratory equipment provides for a possibility to perform various measurements of direct current and alternating current, as well as to perform experiments with various direct current and alternating current circuits

Computer network laboratory – laboratory equipment provides for a possibility to create various computer network configurations, as well as to perform experiments with these configurations.

Virtual and augmented reality laboratory – laboratory equipment provides for a possibility to create various virtual and augmented reality projects. To scan, process and print 3D objects.

Multimedia laboratory – laboratory equipment provides for a possibility to take photos and videos, as well as to fully process the material recorded.

Number of computers available: for students – 160 pcs, for academic staff – 45 pcs; for administrative staff – 60 pcs, number of stationary computers in auditoriums – 30 pcs (apart from computer classes); Laptops – 60 pcs; multimedia projectors – 45 pcs.

Students are provided with access to the following specialty software used in course training

programmes – AutoCAD, Blender, Blender x2.7, Autodesk REVIT, Heat (Energy Efficiency) Lily (Ecology), Solidworks, SEMA, computer software for building life cycle calculation -.OneClickLCA.

2.3.3. Provide information on the system and procedures for the improvement and purchase of the methodological and informative provision. Description and assessment of the availability of the library and the databases to the students (including in digital environment) and their compliance with the needs of the study field by specifying whether the opening times of the library are appropriate for the students, as well as the number/ area of the premises, their suitability for individual studies and research work, the services provided by the library, the available literature for the implementation of the study field, the databases available for the students in the respective field, the statistical data on their use, the procedures for the replenishment of the library stock, as well as the procedures and possibilities for the subscription to the databases.

Funding for Vidzeme University of Applied Sciences library collections is not divided by study fields because during the study process the library resources are often used by students of several study fields.

The most important items within each course are renewed on a cyclic basis, while the most current items of additional literature are purchased regularly.

Table 8. Funding for the purchase of literature items and subscriptions to electronic databases

Expenses for library collections	2014, EUR	2015, EUR	2016, EUR	2017, EUR	2018, EUR	2019, EUR	2020, EUR	2021, EUR
Periodicals	2 923	2 077	1 930	1 955	2 218	1 865	1 623	1 573
Books	9 828	4 394	5 873	17 954	14 470	10 849	7 303	8 502
Electronic documents and databases	19 251	468	4 373	2 870	2 789	3 068	523	5 535
Total:	**32 002**	**6 939**	**12 176**	**22 779**	**19 477**	**15 782**	**9 449**	**15 610**

The library is open to readers 51 hours per week. ViA students and lecturers have remote access to databases and electronic catalogue 24/7. The library is also accessible for people with physical disabilities. The library provides all the traditional library services. Information about resources and services is available at the library can be found on Vidzeme University of Applied Sciences website under the section **library**. On the 1st floor reading room (455.10m^2) students have access to 130 units of periodicals in Latvian, Russian, English and German in a paper format of which 34 units are subscribed by ViA library. Fiction and archive of selected periodicals are also available. On the 2nd floor, there is a computerized reading room (67.80 m^2) with 18 work stations, 4 more work stations are in the main room. The computers have also PSPP data processing programme. Furthermore, there are two reading rooms (14.50 m^2 each) for group work, four individual reading rooms (5.20 m^2 each) and a quiet reading

room (79.20 m^2) on the second floor. The area of the second floor library is 776.00 m^2. There one can find specialised literature, a collection of local history of Valmiera city and surrounding municipalities, as well as the European Commission information centre Europe Direct that provides information on the European Union, as well as the archive of the best scientific papers by ViA students. For the convenience of users, a “silence booth” has been installed for telephone or skype calls, where louder conversations are possible without disturbing other library visitors.

All processes of ViA library are automated by means of the library information system ALISE. Since January 2006, there is i-library available providing for a possibility to order books from the electronic catalogue of Valmiera Integrated Library, to book those items that are already lent, to extend the lending period for books, to view data on the books lent/not returned on time/booked. Since spring 2015, the mobile version of the library information system ALISE is available. Thus, the electronic catalogue is also easily accessible from the mobile devices.

To provide high quality support to VIA education and scientific process, the library offers individual consultations, tours and group training to students, academic staff and other interested parties. Educational activities are organized by the specialists of both ViA Library and Valmiera Library. The goal of training is to introduce new students to Valmiera Integrated Library and its services, to show how to work with the library’s electronic catalogue and subscribed online full-text electronic databases. It is possible to apply for a training session also electronically. In the academic year of 2019/2020, the first year students had 15 introductory lectures on the library and its services, students got acquainted with the electronic catalogues and information search in the databases available in Valmiera Integrated Library and remotely accessible resources of the National Library of Latvia.

The library offers an Interlibrary Loan Service (ILS) free of charge as it is provided in cooperation with Valmiera Library. The total number of ViA Library documents (physical units) in August 2020 was 29047 units of which books – 21772, electronic documents – 352, audiovisual documents – 475, cartographic documents – 99, serial publications – 3500, unpublished documents – 2849.

The total number of ViA Library documents (physical units) as of January 2021.

Type of material	Quantity
Books	21908
Electronic documents	352
Audiovisual documents	475
Cartographic documents	99
Serial publications	2427
Unpublished documents	2853

For the study process in the programme “Construction of Wooden Houses and Eco-building”

UDK	Description	Items	Copies
004	Computer engineering. Internet	570	1325

331.4	Working conditions. Workplace organization. Labour protection	24	59
334	Organization of economics and cooperation (including project management)	110	290
349.4	Law of land, property, settlements planning (including building codes)	20	29
502	Nature. Nature research and protection	285	551
504	Environment protection	54	158
517	Mathematical analysis. Higher mathematics	31	199
528	Geodesy. Cartography	11	27
53	Physics (including units of measure, mechanics)	107	167
551	General geology. Meteorology. Climatology. Historical geology. Stratigraphy. Paleogeography	75	152
621.3	Electricity and energy (including electricity and energy, electric machines)	146	303
624	Design and construction of buildings in general. Civil engineering and construction technology	14	53
658	Business. Business organization	366	1127
658.3	Mutual relations in the company. Staff	186	493
681.5	Automated control technology. Smart technology	15	53
69	Construction	122	312
696	Building equipment, engineering networks and engineering devices, equipment	5	13
71	Settlement planning. Urban planning. Landscape, park and garden architecture	108	199
72	Architecture.	337	700
744	Drawing. Technical drawings	16	49

In addition, during the study year of 2021/2022, the range of literature was supplemented with the following materials:

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Bimal Kumar. A Practical Guide to Adopting BIM in Construction Projects. 2016., 192, p. ISBN 9781849951463	1	Computer sciences. IT and computer graphics applications / BIM I and BIM II
H.J. Blaß, C.Sandhaas. Timber Engineering - Principles for Design. KIT Scientific Publishing. ISBN 978-3-7315-0673-7. 2017. 658 p.	1	Building structures I and II
J.Porteous, A.Kermani. Structural Timber Design to Eurocode 5, 2nd Edition. Wiley-Blackwell. ISBN: 978-0-470-67500-7. 2013. 640 p.	1	Building structures I and II
Anne Grete Hestnes, Nancy Lea Eik-Nes Zero emission buildings. Fagbokforlaget, 2017	5	Construction of wooden houses and eco-building / Building designing principles I and II
E.Allen, P.Rand. Architectural detailing. Function, constructability, aesthetics: Third edition. John Wiley & Sons, Inc. ISBN 978-1-118-88199-6. 2016. 380 p.	1	Construction of wooden houses and eco-building

E.Allen, J.Iano. Fundamentals of building construction, materials and methods: Seventh edition. John Wiley & Sons, Inc. LCCN 2018061433. 2019. 943 p.	1	Construction of wooden houses and eco-building
F.D.K.Ching. Building construction illustrated: Sixth edition. John Wiley & Sons, Inc. ISBN 9781119583080. 2019. 515 p.	5	Construction of wooden houses and eco-building
M.Green, J.Taggart. Tall wood buildings: design, construction and performance. Part of Walter de Gruyter GmbH. ISBN 978-3-0356-0475-7. 2017. 177 p.	1	Construction of wooden houses and eco-building

Subscribed databases

Full-text databases: EBSCO, ScienceDirect, Scopus, Web of Science. Besides, Travelnews.lv, Lursoft, i-finanses and i-law are also available. Building e-guide. In collaboration with Valmiera Library, the following databases are available to the readers: Britannica Online Library Edition, EBSCO eBook Public Library Collection, LETA Archive, nozare.lv, Letonika, "Lursoft" newspaper archive, as well as a collection of DVDs. Mostly, databases are available from all computers operating in ViA data transmission network. Individual databases may be accessed only on-site at the library with a special permission (Lursoft, i-finanses, i-law).

The library actively participates in the testing of electronic resources and full-text databases offered by the State Agency "Culture Information Systems Centre". In the academic year of 2019/2020, there were three such databases.

During the spring semester of the Covid-19 pandemic, some academic publishers gave access to their electronic resources – SAGE, Proquest, Cambridge Core, ACM Digital library, etc. The current list is available on https://www.myloft.xyz/free-resources-for-covid-19/

Since March 2020, remote access to some digital collections of the National Library of Latvia has also been opened.

Description of subscribed databases

ScienceDirect is one of the world's largest databases of scientific, technical, and medical articles, covering the full text of Elsevier Science journals. Thematic coverage: **Exact sciences, technical** sciences, social sciences and humanities

EBSCO – is a multidisciplinary database platform of e-books, e-journals and other e-resources, consisting of several full-text and review databases. Thematic coverage: Humanities, social sciences and science, **exact and natural sciences** (politics, history, psychology, philosophy, ethics, geography, biology, chemistry, mathematics, physics, etc.)

Web of Science is a leading electronic resource research platform developed by *Clarivate Analytics*. A single platform provides an integrated approach to high-quality literature, helps find the latest and most important scientific publications in high-impact factor journals, conference proceedings, etc., as well as shows citations of scientific publications. Thematic coverage: Social sciences and humanities, **exact** sciences.

Scopus (published by Elsevier) is a bibliographic citation database of research literature, the database contains the citation index of scientific articles. The full texts of the articles can only be downloaded from the journals available in ViA's subscribed databases or from those which are freely available. Thematic coverage: Social sciences and humanities, **exact sciences**

Lursoft (annual reports of companies) – available only in the library.

Databases available in cooperation with Valmiera Library

The business portal **Nozare.lv** is an information service of the national news agency LETA which, combining LETA specialists' knowledge and experience in the preparing operational and analytical information, provides the most up-to-date and competent business information online.

Letonika is a Latvian reference and translation system on the Internet, an Internet service whose main purpose is to provide systematized, encyclopaedic reference and translation information, creating new, identifying existing and gathering digital resources about Latvia at one place. The database contains both open access and subscribed resources.

Lursoft Newspaper Library is a large collection of Latvian newspapers and BNS publications on the Internet which is updated with an average of a thousand new publications every day. The newspaper archive has been available since 1994. Lursoft newspaper library offers its readers publications on the Internet and also a possibility to search for articles by the desired parameters and the opportunity to comment on them.

The **LETA archive** is one of the largest sources of information necessary for the company's operations. The materials stored in the archive allow you to obtain complete information, as well as easily and quickly analyze and forecast events over a period of time. The LETA archive adds 60,000 items of information every month and currently contains more than four million records. The archive is available in three languages: Latvian, English and Russian

EBSCO eBook Public Library Collection – covers 43,000 e-book titles specifically selected to meet the needs of public library readers.

Available statistics on the use of databases in 2020

Database	Viewing sessions	Searches	Downloads, views
EBSCO	**21 698**	**79 098**	**11 474**
e-Book Public	**2369**	**10 277**	**1307**
Web of Science	**880**	**1958**	**2500**
Scopus		**2746**	**2718**
Science Direct		**11 172**	**11 896**
Lursoft		**425**	**1298**
T&F e-Books	**1 month**		**107**

Available statistics on the use of databases in the academic year of 2019/2020

EBSCO database – 22938 sessions, 83205 searches, 7810 full texts opened.

Science Direct – 10130 full text views

Web of Science – 703 sessions

Scopus – 1868 searches

LURSOFT – 1643 requests

Available statistics on the use of databases in the academic year of 2018/2019

481 book views during the **SAGE Knowledge** trial.

EBSCO database – 24938 sessions, 94903 searches, 8927 full texts opened (trial statistics are also included). **Science Direct** – 13832 full-text views

Web of Science – 647 sessions

Scopus – 1449 searches, viewed 1030 records

LURSOFT – 1710 requests

Available statistics on the use of databases in the academic year of 2017/2018

981 book views during the **Taylor & Francis eBooks** trial.

Letonika January-June of 2018 – 2261 views, 1130 sessions

EBSCO database – 25287 sessions, 82345 searches, 7392 full texts opened (trial statistics are also included).

LURSOFT – 1,405 views

Database subscription procedure

Full-text databases are subscribed in cooperation with the State agency "Culture Information Systems Centre" within the programme "Electronic Publications for Latvian Libraries", as well as in cooperation with the Ministry of Education and Science within the project "Academic Network". A decision to subscribe or unsubscribe a database is made in the meeting where development, academic and scientific issues are discussed, upon agreement between the directors of the study programmes and scientific institutes.

Procedure for developing library collection

The library collection corresponds to ViA study programmes and fields, and books published in Latvia are purchased, in cooperation with Valmiera Library, in small quantities each month. The library also accepts donations from individuals and legal entities to develop library collection with missing printed materials or those having insufficient number of copies, and other documents.

Books published outside Latvia are purchased at the request of the academic staff in accordance with ViA Library book ordering and usage procedure.

If it is an open access resource available on the web or in the databases subscribed by the library, a printed copy is rarely purchased.

Funding for ViA library collections is not divided by study fields because during the study process the library resources are often used by students of several study fields. The most important items within each course are renewed on a cyclic basis, while the most current items of additional literature are purchased regularly.

In cases where the necessary books are not available in the library, a lecturer fills in a *book ordering form for developing ViA Library collection* and receives approval from the director of the study field. Upon receiving a request, the library makes sure whether the book has not been pre-ordered and conducts a price survey. The book order should be placed before the beginning of the course.

The staff of the library compiles "denied" information requests, analyzes them, and advises the lecturer a possible solution (a newer book, another book should be purchased, etc.).

Being aware of research interests of the lecturer, the library sends information about newly published books or other resources.

Collection digitization level

The library does not digitalize its collections; it collects students' diploma papers (Master's theses, Qualification papers) that are already in a digital form. It is possible to access papers through library's electronic catalogue under the section "ViA Student Papers", out of 2849 entries, access to the full text is for 610 student papers.

A database of lecturers' publications is being compiled in the library's electronic main catalogue under the section "Publications by ViA lecturers". The database contains 387 analytical descriptions of lecturers' publications (monographs, edited and compiled books, studies, conference materials, etc.). If these materials are available on the Internet, links to their full text are provided in the descriptions.

Possibilities to renew and improve informative provision

It can be done by using funds from the planned ViA Library budget, also within the framework of various projects (SAM), as well as in cooperation with Valmiera Library. The library also accepts donations to replace damaged, worn-out copies.

Field of engineering sciences

To promote research carried out by ViA students and to make specialists of the field know about it, the best 26 papers written by the students of the programme "Construction of Wooden Houses and Eco-building" are available under the section "ViA student papers" of the library's electronic joint catalogue, 18 of which have access to the full text of the paper.

2.3.4. Provide a description and assessment of information and communication technology solutions used in the study process (e.g., MOODLE). If the study programmes within the study field are implemented in distance learning, the tools specially adapted for this form of study must also be indicated.

In October 2021, ViA made a transition to a unified information technology communication system for both lecturers and students operating in the MS Office 365 environment. The Faculty of Engineering was the first of the ViA structures to make full use of it and all possibilities of the MS Office 365 environment, incl. automating the services provided to students to ensure the study process, for example, an automatic form for drawing up a student internship agreement, application for the final examination and qualification work topic.

Use of ICT in ensuring the study process

Several information and communication technology systems are integrated to ensure the study process.

The Moodle system is used to provide study course study materials to students (lecture materials, literature, additional literature, etc. course materials). The Moodle system is also used for submitting term papers and homework.

LAIS is a study administration system in which students register for courses and follow the study progress, which is administered by the ViA Study Administration Group.

Students can quickly follow the list of lectures and its changes using the system lcijas.va.lv, which is administered by ViA Facilities Group.

Due to the limitations of Covid-19, many lectures were organized online using the Webex platform, and in October 2021, the MS Office - MS Teams application was switched to provide online lectures using all the features offered by the application for quality remote work.

Provision of technology and ICT solutions in the content of the program

In the study program, digitization in the construction industry is one of the main guidelines.

The applied ICT solutions can be divided as follows:

- Specialized courses in digitalization of construction, such as BIM I (2CP) and BIM I (2CP) (BIM - Construction Information Modeling), where Autodesk Revit and SEMA software are used as the main training platform; and "Construction project organization, management, BIS" course, within which the Latvian Construction Information System administered by BVKB (Construction State Control Bureau) is mastered.
- ICT support solutions that support the acquisition of study courses, such as "IT tools for project management" within the Project Management course, MS Office Excel calculations, specialized energy efficiency analytics and calculation tools such as "Heat2", "Wufi2D", as well as open source remote access platforms for practical demonstrations. In the study course "Practical works of engineering geodesy (surveying)" students have the opportunity to work with the latest laser surveying equipment, thanks to cooperation with a company in the field.
- ICT solutions that can be acquired within the internship Internship I), for example, if students choose to do an internship in a partner company, then within the internship the student acquires the construction production user software Dietrich, adding that the software license will be available to students throughout the study period (starting from 2022 .year of admission.

Digitization and ITC applications for providing feedback

At the Faculty of Engineering, incl. In the study direction, various digital communication tools are used to provide feedback to students, such as electronic surveys and course evaluation questionnaires, in addition to the above, electronic news pages and video format news pages are also used in the study direction.

By developing the field of study, it is planned to expand the feedback in digital format - encouraging students to offer study tours in their companies and share additional educational opportunities, conferences, e-courses using the Microsoft Teams website.

2.3.5. Provide information on the procedures for attracting and/or employing the teaching staff (including the call for vacancies, employment, election procedure, etc.), and the assessment of their transparency.

ViA has developed the Regulations “On Election to Academic and Scientific Positions at Vidzeme University of Applied Sciences” which regulate the procedure for announcing vacancies, assessing applicants and deciding on approval for academic or scientific positions. Vacancies are advertised by announcing a competition on the official website of “Latvijas Vēstnesis”, as well as by publishing information on the ViA website. The principles of openness and access to information are complied

with throughout the entire recruitment process. Persons are elected for academic positions as a result of an open competition. Scientific, pedagogical and organizational qualifications of an applicant for the position of a professor or an associate professor are assessed by the Council of Professors in accordance with the procedures specified by the Cabinet. The scientific and pedagogical qualifications of the applicant for the position of an assistant professor, lecturer or assistant are assessed by the Council of the study field referring the matter to the relevant assembly of the faculty.

Refer to the annex for the "Regulations on Election to Academic Positions at Vidzeme University of Applied Sciences" (see Annex No.12).

2.3.6. Specify whether there are common procedures for ensuring the qualification of the academic staff members and the work quality in place and provide the respective assessment thereof. Specify the options for all teaching staff members to improve their qualifications (including the information on the involvement of the teaching staff in different activities, the incentives for their involvement, etc.). Provide the respective examples and specify the way the added value of the possibilities used for the implementation of the study process and the improvement of the study quality is evaluated.

Professionals of the field, doctors of sciences from various fields of science, and professors are involved in the study field, and they together present high-quality academic staff of the study field. The elected academic staff actively participates in various types of courses, conferences or other events to improve their qualification. Lecturers willingly take part and are happy to use in-service training and experience exchange. In recent years, opportunities to acquire and supplement knowledge of construction digitalization possibilities have been especially relevant; this is also reflected in the changes and additions made to the programme content.

Ensuring and assessing the quality of academic staff performance

ViA has established a common procedure for ensuring the qualification and performance quality of the academic staff. Professional development is regulated by the Regulations "Job Description and Responsibilities of the Teaching Staff of Vidzeme University of Applied Sciences". Training needs of the lecturers are discussed at the level of the study fields, funding is sought within the framework of the faculty and various projects; besides, opportunities are offered to the lecturers to participate in Erasmus+ mobility to improve their qualification, as well as to use other financial resources for professional development visits and participation in academic and professional conferences. From 2018 to 2021, European Social Fund project "Development of Academic Staff and Human Resources of Vidzeme University of Applied Sciences" (SAM 8.2.2) was implemented for the professional development of lecturers providing training in the following areas: English language, digital technology, academic leadership, while internship opportunities at commercial companies contribute to closer cooperation with the industry.

In accordance with the Cabinet Regulations of the Republic of Latvia on the Education and Professional Qualifications of Teachers and the Procedure for Improving Teachers' Professional Competence, professional development may include international mobility appropriate to professional development goals, participation in projects and participation in conferences and seminars as evidenced by the documents issued.

In order to ensure the development of qualification, performance quality and professional development of ViA academic staff, lecturers are given an opportunity to supplement and expand their knowledge and professionalism by gaining experience abroad or by completing internship at foreign higher education institutions/organizations, as well as by participating in relevant seminars and conferences – Erasmus, etc. mobility programmes.

In order to provide an opportunity for the lecturers to improve their academic performance and monitor its quality, the following activities are implemented at Vidzeme University of Applied Sciences:

- Student surveys at the end of each study course – the result summary is sent to the lecturer and the head of the study field;
- Once a year a lecturer's classes are attended by a colleague who afterwards provides feedback. Once a year a lecturer attends a class of his or her colleague;
- At the end of the academic year, the lecturer summarizes the findings of the study course assessments and the experience obtained while observing classes, and writes a summary of his or her academic performance which is discussed with the head of the study field. If the lecturers want, their academic performance is discussed at the meeting of the study council;
- If the head of the study field finds long-standing or serious problems in the academic performance of the lecturer, the necessary professional development measures are discussed with the lecturer, including a possibility to assign a mentor or consultant of the lecturer's choice. If the professional development does not give a positive result, the head of the study field turns to the dean to jointly address this issue.

To ensure the assessment of the quality of ViA's academic staff performance, once per academic year ViA organizes a seminar for lecturers on the study quality assurance issues in which they discuss their experience/observations gained during the lectures.

The director of the study field organizes an additional meeting if it is necessary to address quality improvement issues in more detail and/or to conduct in-depth research of problems (including document review).

Once per academic year (in October), the lecturer has to submit to the dean of the faculty a report on his or her achievements in scientific work, experience gained in projects, seminars and conferences. The information submitted is used for the preparation of scientific reports and self-assessment reports of the study fields.

2.3.7. Provide information on the number of the teaching staff members involved in the implementation of the relevant study programmes of the study field, as well as the analysis and assessment of the academic, administrative (if applicable) and research workload.

Both the elected lecturers and the professionals of the field invited as guest lecturers are involved in the implementation of the study field. This is one of the ways in which the balance between the acquisition of theoretical and practical knowledge is achieved in the study content. It is ensured that the lecturers involved in the implementation of the study field programmes know and understand the relevant subject, they have the necessary skills and experience to effectively transfer their knowledge and insight to students. The decision on the election of the teaching staff (lecturers, assistant professors) and approval of guest lecturers is made by the assembly of the faculty after getting acquainted with the education, qualifications and competencies of each applicant.

The selection of the teaching staff involved in the implementation of the study field programmes is

based on the following criteria:

- direction of scientific activity and research interests,
- competence and knowledge accumulated in academic work (preparation of study courses) in the fields related to the content of the study programmes, applicant's scientific degree and qualification.

A prerequisite for involvement in the implementation of study programmes is as follows: a Master's degree or doctoral degree, or a status of a doctoral candidate, studying in subsequent stages of doctoral studies, as well as knowledge of English at least at B2 level. The criteria for guest lecturers are as follows: at least a Master's degree, as well as significant practical work experience in construction or another field corresponding to the content of the study programme, knowledge of foreign languages and experience in scientific work.

Information on the methodology for the determination of workload of the academic staff is available in the **ViA Remuneration Regulations** in the annex.

The ViA Senate has approved **the Content and responsibilities of the lecturers' work**, which determine the requirements for academic work, research, academic and scientific qualification improvement, and also for administrative work.

17 lecturers are involved in the implementation of the study field, seven of whom are elected academic staff (incl. two assistant professors, three lectures and two visiting assistant professors, who are elected academic staff performing scientific activities at the ViA), three visiting assistant professors and nine guest lecturers.
Refer to the annex for the ViA Remuneration Regulations (see Annex No.14).

Refer to the annex for the Content and responsibilities of the lecturers' work (see Annex No.15).

Refer to the annex for basic information about the teaching staff involved in the implementation of the study field (see Annex No.16).

Refer to the annex for Biographies (CV) of the teaching staff involved in the implementation of the study field (see Annex No.17).

Refer to the annex for basic information about the teaching staff involved in the implementation of the study field in the reporting period (2013-2021) (see Annex No.22).

2.3.8. Assessment of the support available for the students, including the support provided during the study process, as well as career and psychological support by specifying the support to be provided to specific student groups (for instance, students from abroad, part-time students, distance-learning students, students with special needs, etc.).

Students are supported in the study process by the director of the study field, study specialists, as well as employees of the Administrative Department, for more information ***see Part II, Section 2.1.3*** of the report on the management of the study field.

Career and psychological support provided by the higher education institution is available to all ViA students. Career counselling is provided in person, by appointment, and also online through a variety of platforms.

Individual career counselling free of charge is available to students throughout the year and can be used:

- To identify and move towards achievement of their professional goals
- To develop their career intention and action plan after graduation
- To make sure that the study programme chosen is the most suitable, to check their professional suitability for the chosen field
- To receive support as they search for job and a place of internship, to diversify their job searching strategies
- To improve their CVs, covering letters and to help prepare for a job interview
- To understand their goals in life, abilities, talents, etc.
- To plan further education
- To gain structured support for starting a business
- To address other issues related to career development

Potential students can also benefit from career counselling as it helps them in the following:

- To choose the right study programme
- To take tests of their professional suitability for various fields of study and work
- To identify their abilities, talents, values, qualities
- To reduce tension and anxiety about choosing the right study programme and the higher education institution after leaving the school

All ViA students also have access to free psychological support consultations on various problems and issues related to study and personal life. If necessary, students are invited to consult with a psychologist on the following topics:

- adaptation to studies in the first year of studies - difficulties in coping with studies or entering the course;
- study-related stress or anxiety;
- time planning issues;
- lack of motivation and difficulty concentrating on work;
- relationship problems; support for various crisis situations;
- uncertainty or doubts about the right choice of studies or further development of one's career.

Psychological counseling is a collaborative process that helps the student to more successfully solve the current difficulties of life, to gain support in solving various issues, to help see different alternatives to a certain problem.

2.4. Scientific Research and Artistic Creation

2.4.1. Description and assessment of the fields of scientific research and/or artistic creation in the study field, their compliance with the aims of the higher education institution/ college and the study field, and the development level of scientific research and artistic creation (provide a separate description of the role of the doctoral study programmes, if applicable).

ViA’s research strategy is a reaction to the new challenges posed by the transition to a knowledge-based society and globalization. The long-term goal of research activities at ViA is to create and apply new technologies of the next generation knowledge society.

The medium-term goal of research at ViA is to promote the national and regional development of smart

specialization areas and increase productivity by conducting research in the direction of current social and technological challenges.

The common research direction of ViA is digital solutions for social challenges. The following sub-directions of the common research direction are implemented within the study field:

- Smart wood technologies and sustainable construction in the national economy – The need for this research sub-direction is determined by the regional demand, including the need of the specialists prepared by the study programme "Construction of Wooden Houses and Eco-building" implemented at ViA. Internationally, construction of wooden houses and energy efficiency aspects become more and more popular, and the particular research sub-direction, although currently defined as a regional sub-research direction, has a high potential for growth in future. Together with the teaching staff of the field, potential unique research points have been found – the "wood-wood" connections which are rooted in the old Latvian log house building methods and their use in the construction of multi-storey wooden houses. Illuminated and presented in a contemporary context, it is a very interesting research direction for Scandinavian, European requests.

A potential research direction that can be developed in cooperation with other programmes of the Faculty of Engineering is cyber security of construction processes and buildings.

The Faculty of Engineering has also other relevant interdisciplinary research areas which can be viewed in the context of sustainable construction:

- Virtual reality technologies and visualization – The research sub-direction focuses on the development of new, innovative solutions and the improvement of existing solutions in a number of sectors of the economy and society, including tourism, history, medicine, logistics, manufacturing, architecture, training, marketing, etc. The Virtual Reality Technology Laboratory of the Faculty of Engineering was established in 2009 in cooperation with the Fraunhofer Institute Virtual Reality Training and Development Centre (Magdeburg, Germany) and the University of Agder (Kristiansand, Norway). Using the latest ICT technologies in the world, a number of solutions have been created in these areas, and the official approval of this research sub-direction is a logical step to update research activities in the field of virtual reality, the importance of which is also rapidly growing in Latvia.
- E-learning management and technologies – The research sub-direction is focused on the development of new, innovative solutions and on the improvement of existing solutions in the field of education, increasing the availability of innovative e-learning to promote the knowledge-based economy in Latvia, including tourism, history, medicine, logistics, manufacturing, architecture, training, marketing and other sectors of the national economy. The development of this research sub-direction is a proactive response to societal challenges and the goals set out in the lifelong learning policy guidelines – to ensure access to lifelong learning for the population regardless of their age, gender, previous education, place of residence, income level, ethnicity, social status, functional disorders; to develop a high quality education offer for adults which ensures sustainable competences for work, civic participation, personal development and which promotes the development of a competitive knowledge economy based on high skills and democratic society in Latvia. Taking into account the current challenges related to the entry of digital technologies into the knowledge management ecosystem of the society, it is necessary to increase the competence of the society in accordance with the long-term action plan of Latvia which lays down the availability of education and changes in the organization of the educational process, the school as a social networking centre, contextual education and changes of the teacher's profession, the use of e-schools and information technology and lifelong learning. Within the project "Development of Vidzeme Continuing Education Technology Centre" and "Lifelong Learning Development Guidelines 2016-2020 in Vidzeme Region, and the Development of the Prototype of the Technological Solution" a concept for continuing education and the guidelines for

the development of education in Vidzeme region were developed, as well as a prototype of the technological solution was created using the latest ICT technologies. Several solutions have been created and research in e-learning management and technology has been conducted to update the development of digital solutions for various social challenges, the importance of which is also rapidly growing in Latvia.

- Socio-technical systems modelling technologies – The research sub-direction is focused on interdisciplinary research which includes the assessment of engineering technology solutions in the social system and the evaluation of social science research results using simulation modelling technologies, as well as company modelling methodologies. The research sub-direction includes the generation of new knowledge not only in the context of applied research, but also in the development of simulation modelling technologies and provides input and innovations in the sub-sectors "Electrical Engineering, Electronics, Information and Communication Technologies", "Systems Analysis, Modelling and Design" while working on new solutions not only in the socio-technical systems modelling, but also in the development and assessment of the information technology ecosystem which is currently a vast field of research in the European context. The sub-field of research has been developed since 2006 when the structural unit "Institute of Sociotechnical Systems Engineering" was established in ViA.

A collaborative platform for assessing the sustainability of nature and buildings through simulation and modelling technologies has been established in this research sub-direction. It has the following main research tasks:

- modelling of adoption and sustainability of socio-technical systems;
- heterogeneous and distributed imitation modelling technologies;
- modelling the sustainability of energy efficiency of natural resources and buildings.

2.4.2. The relation between scientific research and/or artistic creation and the study process, including the description and assessment of the use of the outcomes in the study process.

Sustainable construction, and especially wood construction, has a long history in the Latvian economy, as well as in other Northern European countries, however, as a result of generational change, a lot of knowledge has been lost.

The return of the "well-forgotten old" in today's context is an opportunity to develop a unique direction of research such as the use of "wood-wood" compounds in wooden structures. Accordingly, lecturers who specialize in this particular area integrate specific research tasks into their course curriculum and encourage students to think about research issues and applications in practice.

Construction processes and cyber security of buildings are the areas which can be further researched making additions to the study programme in future and motivating students to undertake interdisciplinary research.

Other areas of research also directly or indirectly affect future construction managers. The rapid development and widespread use of the Internet will affect not only the development of social networks, but also any type of industry and business, as it will serve as a comprehensive and sufficiently secure basis for information provision.

Furthermore, timely modelling of the consequences of political decisions will allow reducing the number of voluntary decisions and improve the predictability of situations. The use of virtual and augmented reality in e-learning systems will also speed up the acquisition of knowledge and reduce the potential

amount of costs.

2.4.3. Description and assessment of the international cooperation in the field of scientific research and/or artistic creation by specifying any joint projects, researches, etc. Specify those study programmes, which benefit from this cooperation. Specify the future plans for the development of international cooperation in the field of scientific research and/or artistic creation.

The academic staff involved in the study process is mostly professionals with extensive practical experience as the study programme is the 1st level professional higher education programme. The scientific activity of the teaching staff is mainly focused on the following applied research areas: in the field of heating and ventilation – I.Dimdiņa; in the field of energy efficiency and eco- materials - V.Zaķis, J.Simanovska, in the field of physics – I.Birzniece, in the field of mathematics – A.Cunska. Lecturers and researchers of the faculty are involved in the following research directions: Smart technologies and eco-building in the national economy; Virtual reality technologies and visualization; Research is focused more on higher levels of study. At the 1st level, research is more like a confirmation of the competence and growth potential of the lecturers. The positive trend is that many studies are highly interdisciplinary.

Vidzeme University of Applied Sciences is actively involved in international cooperation projects with existing partner organizations and also initiates international projects with new partner organizations, thus, providing also for opportunities to join the field.

Below are some of the projects which are implemented by the Faculty of Engineering.

reSilienT fARminG by Adaptive microclimaTe managEment (STARGATE) – STARGATE aims at developing an advanced, multiscale and holistic climate methodology for smart farming, bringing innovation in microclimate and weather risk management, as well as in the field of landscape design. The methodology is based on the integration of earth observation, weather/climate and the Internet of things to promote more efficient farm/land management; opportunities to adapt to climate change; the formulation of local and regional policies leading to better landscape management, protection against climate risks; implementation of microclimate changes.

Project partners: Greece, Czech Republic, Israel, Spain, Switzerland, Austria, Poland, Germany, Norway, Belgium

Estimated duration of the project: 2019 – 2023

Study programme involved: Doctoral study programme in modelling of sociotechnical systems

Erasmus+ initiative “European University” project “Engaged and Entrepreneurial European University as Driver for European Smart and Sustainable Regions” (EUDRES). The goal of the project is to promote the development of small and medium-sized European cities and their regions. The project envisages a significant strengthening of the regional innovation system, to contribute to digital, environmental and sustainable transformation of the regions, thus moving towards smart and sustainable regional development. It is expected that the project will lead to the development of a European university model and management concept, joint study courses and programmes, mobility of lecturers and students, and research in the field of artificial intelligence.

Project partners: Austria, Belgium, Romania, Hungary, Portugal

Estimated duration of the project: 2020 – 2023

Link with the study process: within the project, it is planned to implement various types of activities (hackathons, I-Lab), in which ViA students of the field together with students from the participating countries will work on the development of solutions (IT/AI, well-being, circular economy) for the improvement of the region/life quality of the region. The teaching staff from ViA and the project partner universities will also be involved in the activities.

Involved study programmes: all study programmes and programmes offered by ViA

Advances: Increasing society's cyber security capabilities. The project will address the urgent need for a scientific understanding of the limitations and capabilities of humans in a cyber-attack chain by researching human behaviour in cybersecurity, combining research areas of computer science, psychology and human genomics. The project will result in a set of methodologies and tools that will include specific software components for data collection and analysis, self-review tools to collect actual data on social behaviour patterns.

Project partners: Estonia, Lithuania, Norway, Liechtenstein

Estimated duration: 2021-2023

Involved study programmes: Doctoral study programme in modelling of sociotechnical systems

The lecturers of the study programme have improved their knowledge and participated also in local projects.

Project "Improvement of Vidzeme University of Applied Sciences (ViA) academic staff and development of human resources" (No.8.2.2.0/18/A/012)

Implementation period: November 2018 – November 2021

The following lecturers improved their academic competences within the framework of the project:

- Ojārs Bāliņš (participated in the activities of the academic leadership and digital course programmes, acquired English; O. Bāliņš from 01.07.2020 to 30.11.2021 was responsible for the implementation of the project in the field of "Information technologies, computer technology, electronics, telecommunications, computer control and computer science"
- Jānis Bikše (participated in the academic leadership and digital course programme, completed internship at a company)
- Inese Birzniece (participated in the activities of the academic leadership and digital course programme, completed internship at a company)
- Aija Cunska (participated in the activities of the academic leadership programme)
- Dainis Gelbergs (participated in the activities of the digital course programme)
- Dace Krutova (participated in the activities of the academic leadership and digital course programme, acquired English, completed internship at a company)
- Maija Sedleniece (participated in the activities of the academic leadership and digital course programme, acquired English)
- Jana Simanovska (participated in the activities of the digital course program, acquired English)
- Valdis Zaķis (participated in the activities of the academic leadership and digital course programme, completed internship at a company)

2.4.4. Specify the way how the higher education institution/ college promotes the involvement of the teaching staff in scientific research and/or artistic creation. Provide the description and assessment of the activities carried out by the academic staff in the field

of scientific research and/or artistic creation relevant to the study field by providing examples.

Most lecturers are practitioners, working for or running private sector companies. It makes it difficult to involve them in research. However, we have found an approach to developing a research focus that is also relevant to the private sector, so we hope for more active involvement and interest of lecturers in research in future.

Refer to the annex for the List of publications of teachers, patents, works of artistic creation for the reporting period (see Annex No.18).

2.4.5. Specify how the involvement of the students in scientific research and/ or applied research and/or artistic creation activities is promoted. Provide the assessment and description of the involvement of the students of all-level study programmes in the relevant study field in scientific research and/ or applied research and/or artistic creation activities by giving examples of the opportunities offered to and used by the students.

A large part of students (sometimes even 80 % of students) work in the construction industry on a daily basis and come to lectures with their share of experience. Students are motivated to test their knowledge in practice and to compare different types of experiences. Practitioners are interested in applied research and quick results that can be applied in practice. Therefore, study course plans emphasize the possibilities of in-depth research of current, practical issues for the industry. Students mainly get interested in research during the process of writing interesting and topical course papers and by exploring a current topic of the qualification papers through which their interest in the research becomes deeper.

The content and scope of students' research work is determined by the State Education Standard, which does not separately provide for the allocation of research work.

The proportion of students' research activities is determined by the plan of the study program and accordingly - the research activities are integrated into various study courses, internship activities and execution of qualification thesis.
The research work is included in the following study courses, which in the study program plan mark the so-called "anchor course":
1. Building constructions I (wood), 2nd semester - research direction "timber-timber" connections (see section 2.4.1)
2. Construction project organization, management, BIS - preparation of recommendations for BIS system improvements, user experience improvement;
3. Wooden Houses and Eco-building - construction of wooden buildings worldwide;
4. Energy efficiency - benefits and disadvantages of interoperability of sustainable materials and alternative energy sources.

According to the Regulations and Qualification Paper, the development of a qualification paper is an individual research work based on the student's practice, as a result of which the student is expected to provide analytical and structured conclusions, recommendations for the application of materials, constructions, construction processes, sustainability and energy efficiency.

One of the most recent such works in the 2020/2021 academic year is qualification paper "Increasing the energy efficiency of a residential building in order to meet the criteria of a passive house."

Students have access to a wide range of resources for scientific research activities, with opportunities to create and develop innovations in interdisciplinary collaboration within the entire higher education institution. Until now, due to their busy schedule, students have passively used the offered opportunities, but the research interests of the study field and the program are integrated into the study process, encouraging the research of current events and innovations within the study courses and we expect it to increase in following years due to the focus of research interest we have found (see section 2.4.1.).

2.4.6. Provide a brief description and assessment of the forms of innovation (for instance, product, process, marketing, and organisational innovation) generally used in the higher education institution, especially in study field subject to the assessment, by giving the respective examples and assessing their impact on the study process.

The study programme introduces several innovations at different levels which are mainly based on the clear development strategy of the study field and programme such as marketing innovations – positioning of the study field in the region and Latvia, personal newsletters, video speeches, master classes for pupils, addressing companies, research of the needs and target "user"; process innovations – aligning student training methods with the "anchor-subjects" and "anchor-lecturers", developing the principles of mentoring; organizational innovations – organizing the work of lecturers as a team work, regular reference points and meetings, process synchronization.

All innovations ensure the stability of the study field and programmes while maintaining adaptability and providing "student-centered" teaching.

2.5. Cooperation and Internationalisation

2.5.1. Provide the assessment as to how the cooperation with different institutions from Latvia (higher education institutions/ colleges, employers, employers' organisations, municipalities, non-governmental organisations, scientific institutes, etc.) within the study field contributes to the achievement of the aims and learning outcomes of the study field. Specify the criteria by which the cooperation partners for the study field and the relevant study programmes are selected and how the cooperation is organised by describing the cooperation with employers. In addition, specify the mechanism for the attraction of the cooperation partners.

ViA provides various cooperation opportunities in Latvia:

- Inter-university cooperation within the framework of cooperation agreements entered into;
- Cooperation within professional organizations;
- Cooperation with companies, local governments, State and non-governmental organizations;
- Cooperation with regional secondary schools and vocational secondary schools;

Cooperation with higher education institutions

Inter-university cooperation umbrella agreements have been entered into with Riga Technical University,

Latvia University of Life Sciences and Technologies and the BA School of Business and Finance and with Rēzekne Academy of Technologies, with which an agreement has also been entered into ensuring the programme continuity, if necessary.

Within the framework of inter-university co-operation, it is planned to expand co-operation in higher education, studies, research and other areas related to the development of higher education institutions.

The directions of cooperation with partner universities in Latvia are various and unlimited, including:

- mobility of students and other staff;
- science and research;
- development and implementation of joint study programs;
- the opportunity for students of one party to register as listeners in the study programs of the other party;
- projects to be implemented within the framework of various financial instruments (together with RTU, several projects have been implemented in research projects financed by the ERDF and MEPRD;
- culture and sports;
- Circulation of information and mutual technical assistance;
- establishment of a single computerized plagiarism testing network.

The benefits of the study field from the inter-university agreements so far have been related to the mobility of students and staff, exchange of experts, ensuring the development of quality fields and programs, as well as ensuring the flow of information and the introduction of a common system for protecting against plagiarism.

Based on these agreements, we also foresee several opportunities that would help in positioning and development of the study field in the next planning period.

Cooperation within different networks

ViA is involved in several partner networks: LIAA – within the framework of cooperation agreement Polaris, Junior Achievement – within the framework of cooperation agreement between vocational schools of Vidzeme region and the higher education institution. Constant cooperation with the Latvian Wood Construction Cluster is maintained.

In total, ViA has entered into more than 40 internship umbrella agreements. It allows implementing successful cooperation activities with various ViA partners such as exchange of students and lecturers, exchange of experience, joint projects, courses, seminars, guest lectures, research and conferences, as well as involvement in examination commissions and receiving feedback to assess the quality of studies.

ViA has strengthened long-term cooperation with Vidzeme Planning Region (VPR). Within the framework of cooperation, the directors of the study field and lecturers of the study programme have had the opportunity to join cooperation networks with regional companies, to participate in cross-border project activities, to improve knowledge, to access a wider network of private and public sector partners and to participate in practical, scientific and research activities within the framework of the European projects.

In cooperation with the Latvian Wood Cluster, both students and lecturers have had an opportunity to improve their knowledge, to go on experience exchange trips, to participate and access a network of companies in the wood construction industry. The Wood Cluster has helped to establish a long-term cooperation with several companies. Cooperation with SIA “Pavasars Housing” has expanded within the framework of the new programme plan. *For more details, see section 3.2.4 of Part III of the report andd Annex 32 of the Internship Regulations.*

Cooperation partner selection criteria

Upon choosing cooperation partners for the study field and within the study programmes from the academic environment, both the study programme offered by the specific partner institution and the cooperation potential are assessed. In most cases, the lecturer cooperation with the lecturers of the particular partner university established previously within the framework of projects/scientific research plays the determinant role in the choice of partner universities. Cooperation with employers is regularly strengthened and established within various industry associations, as well as by establishing an active dialogue with entrepreneurs in the region and participating in the development of various technological solutions, offering training, qualification opportunities, and internship possibilities for students. The head of the study field regularly meets with the representatives of the municipality, the representatives of the Business Incubator, the Latvian Wood Construction Cluster, as well as with entrepreneurs, and informs them of the latest news of the study field and cooperation possibilities.

Refer to the annex for List of cooperation agreements (see Annex 19).

2.5.2. Provide the assessment as to how the cooperation with different institutions from abroad (higher education institutions/ colleges, employers, employers' organisations, municipalities, non-governmental organisations, scientific institutes, etc.) within the study field contributes to the achievement of the aims and learning outcomes of the study field. Specify the criteria by which the cooperation partners suitable for the study field and the relevant study programmes are selected and how the cooperation is organised by describing the cooperation with employers. In addition, specify the mechanism for the attraction of the cooperation partners.

ViA also provides various cooperation opportunities abroad:

- Mobility of students and staff within the framework of Erasmus,
- Inter-university cooperation within the framework of cooperation agreements entered into (apart from Erasmus, 22 programmes),
- Cooperation within the networks of international organizations/partners,
- Cooperation with foreign companies, local governments, State and non-governmental organizations.

Joint cooperation has been established with education and research institutions in the neighboring countries – Estonia and Lithuania, as well as with the higher education institutions and research institutes in Italy, Poland, Spain and Germany. The cooperation with Fraunhofer Institute FhG in Germany should be emphasized in particular, and in October 2019, Edgar Lorenzo Saezno, a postdoctoral researcher, visited the University of Valencia in Spain to develop cooperation in the field of circular economics and gave a lecture on "Bioclimatic Design and Wood Construction".

During the reporting period, no foreign students were admitted to the programme, as the programme is available only in Latvian. However, in 2021 co-operation was started with two lecturers, who apply their education and practical experience outside Latvia and teach courses such as Structural Analysis, Construction of Wooden Houses and Eco-building, and Landscape Architecture and Spatial Planning. Cooperation with these lecturers will be continued after the re-accreditation of the study programme.

In total, Vidzeme University of Applied Sciences has entered into more than 120 cooperation agreements with partner institutions from 48 countries. A list of agreements with partner institutions can be found on the ViA website https://va.lv/sites/default/files/ViA%20Sadarb%C4%ABbas%20Augstskolas_0805.pdf

The goal of the cooperation agreements is to strengthen bilateral cooperation between the higher

education institutions in both the academic and scientific fields, as well as to promote the mobility of students and staff.

Erasmus+ cooperation agreements expire in 2014-2022; for other cooperation agreements, the validity terms vary from 3 to 5 years.

When searching and selecting foreign cooperation partners, the following criteria are taken into account in the selection of partners:

- Common interests in the development of the study field;
- Possibilities for creating new study programs, joint study programs in the future;
- International exchange of students within the framework of studies and practice, expanding the research fields of the study field;
- Mutual exchange of values in research directions, experience, practice, knowledge, etc.
- Lecturers' feedback and previously established cooperation, good experience, on the basis of which to expand cooperation relations in the academic and research direction of the university;
- Joint participation in international industry organizations, working groups and interest groups, such as the EUDRES (European University) project.

When selecting partnering companies from industry, the company's export capacity and ability to operate in the international construction industry environment is taken into account. All partner companies in the field of study are exporting on average 80% of goods and successfully compete in the Baltic Sea region and European markets,
In addition, for instance, the partner company "AB Clausen Latvia" is a Latvian branch of the international construction and design company "AB Clausen". Thus, students have the opportunity to go on internship abroad and work with interesting international case projects during their studies. The company has also given a guest lecture, providing an in-depth insight into the nuances of construction management in Latvia and Denmark.

List of cooperation agreements with other institutions, incl. on internship agreements with exporting companies, see the appendix to the report *(see Annex 19).*

2.5.3. Specify the system or mechanisms, which are used to attract the students and the teaching staff from abroad. Provide the assessment of the incoming and outgoing mobility of the teaching staff in the reporting period, the mobility dynamics, and the issues which the higher education institution/ college faces with regard to the mobility of the teaching staff.

Although international students are not admitted to the study programme, such opportunities exist at Vidzeme University of Applied Sciences.

The Development Strategy for 2016-2020 of ViA sets the goal of strengthening of internationalization as a priority. Currently, ViA is actively involved in Erasmus+ KA 1 activity and plans to increase the number of lecturers who have conducted classes abroad, as well as to increase the number of international lecturers at ViA who perform academic work. Currently, the study programme does not envisage the mobility of incoming students because lectures are not taught in foreign languages, however, it offers students outgoing mobility and cooperates in attracting lecturers. Until now, staff and student mobility has mainly taken place within the EU Member States, however, the new ViA strategy and the annual self-assessment reports of the study fields envisage further development of work with countries outside the EU.

Student mobility

All ViA students have a possibility to benefit from the opportunities provided by the Erasmus mobility programmes and to apply for both exchange studies at the partner higher education institutions and internship scholarships at the companies outside Latvia.

As the average age of the students in the programme is 30 years and studies are combined with a full-time job, participation in the mobility programmes is rare, however, in the academic year of 2020/2021 the first two students of the programme participated in the Erasmus internship mobility and completed internship of 160 hours in France; upon returning to Valmiera they shared their experience and positive feedback on the process, which will serve as a reference and motivation in future.

The participation of international lecturers in the programme will also open up new opportunities for mobility and will provide in-depth insight into the construction industry environment of different countries and highlight the benefits of international experience.

In 2020/2021, student mobility was affected by the global pandemic, as a result of which many of the planned mobilities in the spring semester were cancelled or were not implemented. It is difficult for students to participate in the mobility programmes offered, as virtually 100 % of students are actively involved in the labour market. Incoming mobility programmes are not organized because lectures are not taught in foreign languages.

The study programmes of the field cooperate with several professional organizations. Cooperation has been started with the Association for Construction Industry Digitization and four new international companies of the industry, one of which – SIA "AB Clausen Latvia" – is a subsidiary of the Danish company *AB Clausen* which opens up wider opportunities for international cooperation.

In the coming years, we hope to increase the number of internship places at international companies or companies operating outside Latvia.

During the reporting period, an additional five new cooperation agreements were entered into, four of them with companies and one with a non-governmental organization of the industry.

Lecturer mobility

One of the most important long-term support for the lecturer mobility is Erasmus+. Lecturers involvement in this programme is regulated by the internal regulatory enactment "Procedure for Organizing Teaching Visits at Vidzeme University of Applied Sciences".

Within the framework of Erasmus, since 2013 ViA's academic staff has been in more than 160 mobilities in 45 countries, a large part of them is teaching mobility. Since 2017, ViA has also been active in Erasmus+ which promotes cooperation with the partner countries of the programme (Key Action 1, Key Action 2). ViA's international cooperation specialists provide support in planning and organizing visits, if necessary. Lecturer mobility also takes place using other financial sources – Nordplus, various international projects.

Wider use of the mobility programmes by the lecturers of the field "Architecture and Construction" is hindered by the busyness of the industry and the need to be present at their main place of work.

During the reporting period, the teaching staff of the study programme has participated in the following international mobilities:

Academic year of 2019/2020

Name	Surname	Experience exch./Teaching	Host institution	Country	Start	End	Funding

Jānis	Bikše	Staff training	Ain Shams University	Egypt	02.12.2019	07.12.2019	ERASMUS+ 107
Jānis	Bikše	Teaching	NITHM	India	04.02.2020	13.02.2020	ERASMUS+ 107
Ojārs	Bāliņš	Staff training	Ain Shams University	Egypt	02.12.2019	13.12.2019	ERASMUS+ 107

Academic year of 2018/2019

Ojārs	Bāliņš	Staff training	Ain Shams University	Egypt	14.03.2019	21.03.2019	ERASMUS+ 107
Ojārs	Bāliņš	Staff training	University of Shkodra “Luigj Gurakuqi”	Albania	05.05.2019	11.05.2019	ERASMUS+ 107
Jānis	Bikše	Staff training	Poltava University of Economics and Trade	Ukraine	20.05.2019	24.05.2019	ERASMUS+ 107
Jānis	Bikše	Teaching	Indira Gandhi National Tribal University	India	10.01.2019	17.01.2019	ERASMUS+ 107

Academic year of 2016/2017

Ojārs	Bāliņš	Staff training	Georgian Technical University	Georgia	02.05.2017	06.05.2017	ERASMUS+ 107 Stage 1

Refer to the annex for Statistical data on the mobility of the study field (see Annex 20).

2.6. Implementation of the Recommendations Received During the Previous Assessment Procedures

2.6.1. Assessment of the fulfilment of the plan regarding the implementation of the recommendations provided by the experts during the previous accreditation of the study field, as well as the assessment of the impact of the given recommendations on the study quality or the improvement of the study process within the study field and the relevant study programmes.

The previous assessment procedure took place in 2012, so the context of the recommendations has changed significantly during this period, but in spite of this, all the recommendations provided by the experts have been implemented. It should be noted that the work on the implementation of some recommendations is ongoing and will continue in the next planning period. Such directions include the development of international research projects and the direction of research in general, for which we have developed a competitive offer only at the end of the reporting period. This also provides for a possibility to develop an international training offer for international students.

Refer to the annex for a detailed overview of the recommendations (see Annex 21).

2.6.2. Implementation of the recommendations given by the experts during the evaluation of the changes to the study programmes in the respective study field or licensed study programmes over the reporting period or recommendations received during the procedure for the inclusion of the study programme on the accreditation form of the study field (if applicable).
(Not applicable)

Annexes

I - Information on the Higher Education Institution/ College		
Information on the implementation of the study field in the branches of the higher education institution/ college (if applicable)		
List of the governing regulatory enactments and regulations of the higher education institution/ college	4P-ViA-normativie-akti_Normatives-2022FEB-corr27042022.docx	4P-ViA-normativie-akti_Normatives-2022FEB-red27042022.docx
The management structure of the higher education institution/ college	3P_ViA_structure.pdf	3P-ViA_struktura_paplasinata_pec_18032020.pdf
II - Description of the Study Field - 2.1. Management of the Study Field		
Plan for the development of the study field (if applicable)	6P-Study-Field-Development Plan-ENG-v030222.docx	6P-Studiju virziena attīstības plāns-LV-v030222.docx
The management structure of the study field	1A-ArhConstr-direction-structure-ENG.png	1A-ArhBūv-virziena-struktūra-LV.png
A document certifying that the higher education institution or college will provide students with opportunities to continue their education in another study programme or another higher education institution/ college (agreement with another accredited higher education institution or college) if the implementation of the study programme is terminated.	0-07082020-Cooperation-agreement-RTA-ViA_KECE.doc	0-07082020-Sadarbibas-ligums-RTA-ViA_KECE.pdf
A document certifying that the higher education institution or college guarantees compensation for losses to students if the study programme is not accredited or the study programme license is revoked due to actions (actions or omissions) of the higher education institution or college and the student does not wish to continue studies in another study programme.	24P-2.8.punkts-Studiju-ligums-KOMPENSACIJA_2.8.paragraph-Study-agreement-COMPENSATION.docx	24P-2.8.punkts-Studiju-ligums-KOMPENSACIJA_2.8.paragraph-Study-agreement-COMPENSATION.docx
Standard sample of study agreement	24P-Studiju-liguma-paraugs_Study-agreement-sample.docx	24P-Studiju-liguma-paraugs_Study-agreement-sample.docx
II - Description of the Study Field - 2.2. Efficiency of the Internal Quality Assurance System		
Analysis of the results of surveys of students, graduates and employers	12P-Aptauju rezultatu analize_Analysis of Survey results.docx	12P-Aptauju rezultatu analize_Analysis of Survey results.docx
II - Description of the Study Field - 2.3. Resources and Provision of the Study Field		
Basic information on the teaching staff involved in the implementation of the study field	16P-IĒB-docētāju-saraksts-2022_LV-CSB-list-of-lecturers-ENG.xlsx	16P-IĒB-docētāju-saraksts-2022_LV-CSB-list-of-lecturers-ENG.xlsx
Biographies of the teaching staff members (Curriculum Vitae in Europass format)	17P-CV-IĒB-docētāji-2022_CV-CSB-lectureres-2022.zip	17P-CV-IĒB-docētāji-2022_CV-CSB-lectureres-2022.zip
A statement signed by the rector, director, head of the study programme or field that the knowledge of the state language of the teaching staff involved in the implementation of the study programmes within the study field complies with the regulations on the state language knowledge and state language proficiency test for professional and official duties.	16P-IEB-docetaju-saraksts-2022_LV-CSB-list-of-lecturers-ENG.edoc	16P-IEB-docetaju-saraksts-2022_LV-CSB-list-of-lecturers-ENG.edoc
A statement of the higher education institution/ college on the respective foreign language skills of the teaching staff involved in the implementation of the study programme at least at B2 level according to the European Language Proficiency Assessment levels (level distribution is available on the website www.europass.lv, if the study programme or part thereof is implemented)		
II - Description of the Study Field - 2.4. Scientific Research and Artistic Creation		
Summary of quantitative data on scientific and/ or applied research and / or artistic creation activities corresponding to the study field in the reporting period.	18P-Publikāciju-saraksts_List-of-publications_red-corr_26042022.docx	18P-Publikāciju-saraksts_List-of-publications_red-corr_26042022.docx
List of the publications, patents, and artistic creations of the teaching staff over the reporting period.	18P-Publikāciju-saraksts_List-of-publications_red-corr_26042022.docx	18P-Publikāciju-saraksts_List-of-publications_red-corr_26042022.docx
II - Description of the Study Field - 2.5. Cooperation and Internationalisation		
List of cooperation agreements, including the agreements for providing internship	19P-Sadarbibas-ligumu-saraksts_List-of-Cooperation-agreements.docx	19P-Sadarbibas-ligumu-saraksts_List-of-Cooperation-agreements.docx
Statistical data on the teaching staff and the students from abroad	20P-Mobilitāte-Mobility-2014-2021.docx	20P-Mobilitāte-Mobility-2014-2021.docx
Statistical data on the incoming and outgoing mobility of students (by specifying the study programmes)	20P-Mobilitāte-Mobility-2014-2022-Studējošie-Students-26042022.docx	20P-Mobilitāte-Mobility-2014-2022-Studējošie-Students-26042022.docx
Statistical data on the incoming and outgoing mobility of the teaching staff	20P-Mobilitāte-Mobility-2014-2021-Mācībspēki-Lecturers-26042022.docx	20P-Mobilitāte-Mobility-2014-2021-Mācībspēki-Lecturers-26042022.docx
II - Description of the Study Field - 2.6. Implementation of the Recommendations Received During the Previous Assessment Procedures		
Report on the implementation of the recommendations received both in the previous accreditation and in the licensing and/ or change assessment procedures and/ or the procedures for the inclusion of the study programme on the accreditation form of the study field.	21P-Implementation-of-recommendations-2013-2021.docx	21P-Rekomendāciju-ieviešanas-plāns-2013-2021.docx
An application for the evaluation of the study field signed with a secure electronic signature	00-AIC-iesniegums-ArhBūv-VIRZIENS-eparaksts-ENG.docx	00-AIC-iesniegums-ArhBuv-VIRZIENS-eparaksts.edoc
III - Description of the Study Programme - 3.1. Indicators Describing the Study Programme		
Sample of the diploma and its supplement to be issued for completing the study programme		
For academic study programmes - Opinion of the Council of Higher Education in accordance with Section 55, Paragraph two of the Law on Higher Education Institutions (if applicable)		
Compliance of the joint study programme with the provisions of the Law on Higher Education Institutions (table) (if applicable)		
Statistics on the students in the reporting period		
III - Description of the Study Programme - 3.2. The Content of Studies and Implementation Thereof		
Compliance with the study programme with the State Education Standard		
Compliance of the qualification to be acquired upon completion of the study programme with the professional standard or the requirements for professional qualification (if applicable)		
Compliance of the study programme with the specific regulatory framework applicable to the relevant field (if applicable)		
Mapping of the study courses/ modules for the achievement of the learning outcomes of the study programme		
The curriculum of the study programme (for each type and form of the implementation of the study programme)		
Descriptions of the study courses/ modules		
Description of the organisation of the internship of the students (if applicable)		
III - Description of the Study Programme - 3.4. Teaching Staff		
Confirmation that the academic staff of the doctoral study programme includes not less than five doctors, of which at least three are experts approved by the Latvian Council of Science in the branch or sub-branch of science in which the study programme intends to award a scientific degree (if applicable)		
Confirmation that the academic staff of the academic study programme complies with the requirements specified in Section 55, Paragraph one, Clause 3 of the Law on Higher Education Institutions (if applicable)		

Other annexes

Name of document	Document
5P-ViA_Studiju-kvalitates-nodrosinasanas-politika-APST-31012020-LV.pdf	5P-ViA_Studiju-kvalitates-nodrosinasanas-politika-APST-31012020-LV.pdf
5P-ViA_Studiju-kvalitates-nodrosinasanas-politika-APST-31012020-ENG.pdf	5P-ViA_Studiju-kvalitates-nodrosinasanas-politika-APST-31012020-ENG.pdf
8P-Studiju-rezultatu-atzisanas-nolikums-APST-28082019.pdf	8P-Studiju-rezultatu-atzisanas-nolikums-APST-28082019.pdf
8P-Study-results-recognition-regulations-APPROVED-28082019.pdf	8P-Study-results-recognition-regulations-APPROVED-28082019.pdf
7P-Uznemsanas_noteikumi_2021-2022_APST-28102020-ar-groz-26052021.pdf	7P-Uznemsanas_noteikumi_2021-2022_APST-28102020-ar-groz-26052021.pdf
9P-ViA_Studiju_nolikums_APST-ar-ped- groz-27012021.pdf	9P-ViA_Studiju_nolikums_APST-ar-ped- groz-27012021.pdf
9P-ViA_Study-regulations_APST-ar-ped- groz-27012021-ENG.pdf	9P-ViA_Study-regulations_APST-ar-ped- groz-27012021-ENG.pdf
10P-ViA_Etikas nolikums_26042017.pdf	10P-ViA_Etikas nolikums_26042017.pdf
10P-Regulations-of-ethics-26042017-ENG.pdf	10P-Regulations-of-ethics-26042017-ENG.pdf
10P-Ētikas pārkāpumu izskatīšanas procedūra_shēma.pdf	10P-Ētikas pārkāpumu izskatīšanas procedūra_shēma.pdf
10P-Ethical Infringement Procedure Scheme.pdf	10P-Ethical Infringement Procedure Scheme.pdf
10P-ViA_Etikas nolikums_26042017.pdf	10P-ViA_Etikas nolikums_26042017.pdf
10P-Regulations-of-ethics-26042017-ENG.pdf	10P-Regulations-of-ethics-26042017-ENG.pdf
10P-Ētikas pārkāpumu izskatīšanas procedūra_shēma.pdf	10P-Ētikas pārkāpumu izskatīšanas procedūra_shēma.pdf
10P-Ethical Infringement Procedure Scheme.pdf	10P-Ethical Infringement Procedure Scheme.pdf
11P-Gala_Novertejums_KECE_v3_20190804_ārejie eksperti-Latvian only.pdf	11P-Gala_Novertejums_KECE_v3_20190804_ārejie eksperti-Latvian only.pdf
12P-Nolikums-par-velesanam-akad-amatos-APST-ViA-26012022.doc	12P-Nolikums-par-velesanam-akad-amatos-APST-ViA-26012022.doc
12P-Nolikums-par-velesanam-akad-amatos-APST-ViA-26012022-ENG.doc	12P-Nolikums-par-velesanam-akad-amatos-APST-ViA-26012022-ENG.doc
6P-Studiju virziena attīstības plāns-LV-v030222.docx	6P-Studiju virziena attīstības plāns-LV-v030222.docx
6P-Studiju virziena attīstības plāns-ENG-v030222.docx	6P-Studiju virziena attīstības plāns-ENG-v030222.docx
14P-Darba_samaksas_nolikums_20210224-latvian-only.zip	14P-Darba_samaksas_nolikums_20210224-latvian-only.zip
15P-ViA Docetaju darba saturs un pienākumi 28.05.2014.doc	15P-ViA Docetaju darba saturs un pienākumi 28.05.2014.doc
15P-ViA Content and Duties of Lecturer’s Work 28.05.2014.doc	15P-ViA Content and Duties of Lecturer’s Work 28.05.2014.doc
1P-ViA-SP-akreditacijas-dati-red2021NOV.xls	1P-ViA-SP-akreditacijas-dati-red2021NOV.xls
1P-ViA-study-programms-red2021NOV.xls	1P-ViA-study-programms-red2021NOV.xls
2P-Studentu-statistika-2010-2021-AIKA-visi.xlsx	2P-Studentu-statistika-2010-2021-AIKA-visi.xlsx
22P-Docētāji-pārskata-periodā_2013-2021-Lecturers-reporting-period.xlsx	22P-Docētāji-pārskata-periodā_2013-2021-Lecturers-reporting-period.xlsx
7P-Admission Regulations-2022_2023.docx	7P-Admission Regulations-2022_2023.docx

Construction of Sustainable Buildings (41582)

Study field	*Architecture and Construction*
ProcedureStudyProgram.Name	*Construction of Sustainable Buildings*
Education classification code	*41582*
Type of the study programme	*First level professional higher education study programme*
Name of the study programme director	*Gunita*
Surname of the study programme director	*Ķiesnere*
E-mail of the study programme director	*gunita.kiesnere@va.lv*
Title of the study programme director	*Bc.arch.ing.*
Phone of the study programme director	*+37126881469*
Goal of the study programme	*The aim of the study program is to prepare highly qualified, competent and competitive building construction managers, responding to the industry's demand for modern and advanced specialists, which would increase the productivity and competitiveness of construction companies both locally and internationally.*
Tasks of the study programme	*Tasks of the study program:* *- to provide students with practice-oriented higher professional education in the field of construction, using the opportunities of industrial companies and the region;* *- to develop students research skills and the desire to explore the world around them, on the basis of which to develop students' competencies to promote the process of further self-education and to create motivation for further education;* *- to provide students with the necessary set of knowledge, skills and competencies in the field of construction, so that after successful completion of the study program they will be able to work in private, state and municipal companies, thus promoting competitiveness in the changing socio-economic conditions.*

Results of the study programme	*Knowledge:* *- Understands the impact processes of a building, physical strength, material resistance, building construction, thermal physics, building acoustics and energy efficiency, as well as fire protection of buildings.* *- Understands the management of the construction process (including the BIS system), the role of the construction manager, technical inspection, construction workflow on the site, the regulatory/legal framework, types, composition and application of construction materials/products; knows construction safety rules and procedures.* *- In-depth understanding of the principles of sustainable design and construction, which includes building life cycle calculations, traceability of construction products, environmental protection.* *Skills:* *- Able to perform calculations of building strength and energy efficiency, geodetic measurements with the latest equipment and is aware of the building's climate parameters and fire protection principles.* *- Able to analyze a construction project in the BIM and 3D environment, identifies risks, compile a COP, perform cost estimation; prevention of occupational safety risks and application of OCMA and regulatory enactments.* *- Able to use knowledge of the principles of sustainable construction and process management in practice, to make recommendations for efficient and sustainable construction process management.* *Competencies:* *- Comprehensively analyzes construction processes, takes into account and encourages the use of sustainable, resilient solutions.* *- Able to argue, negotiate and lead a construction team; able to find the necessary information, assess it critically and analytically; orients oneself in the information and regulatory space of the construction industry in Latvian and English.* *- Knows how to apply construction digitization tools and information systems, knows how to follow the development of the industry and endorse the company's competitiveness; knows how to prepare for commissioning.*
Final examination upon the completion of the study programme	*Qualification Paper*

Study programme forms

Full time studies - 3 years - latvian

Study type and form	*Full time studies*
Duration in full years	*3*
Duration in month	*0*
Language	*latvian*
Amount (CP)	*120*
Admission requirements (in English)	*Secondary education*

Degree to be acquired or professional qualification, or degree to be acquired and professional qualification (in english)	-
Qualification to be obtained (in english)	*Building construction manager*

Places of implementation

Place name	City	Address
Vidzeme University of Applied Sciences	VALMIERA	CĒSU IELA 4, VALMIERA, VALMIERAS NOVADS, LV-4201

3.1. Indicators Describing the Study Programme

3.1.1. Description and analysis of changes in the parameters of the study programme made since the issuance of the previous accreditation form of the study field or issuance of the study programme license, if the study programme is not included on the accreditation form of the study field, including changes planned within the evaluation procedure of the study field evaluation procedure.

The most significant changes to the study programme are related to the following: updating and redefinition of the occupational standard "Construction Manager" to "Building Construction Manager" (at the meeting of the Tripartite Cooperation Council of Vocational Education and Employment on 2 August 2021), the implementation of the recommendations included in the previous accreditation report, and recommendations of the internal audit performed in 2019. The content of the updated programme is based on the latest development trends in the industry and the world, offering a competitive, modern training programme for construction managers.

Since 2013, the study programme "Construction of Wooden Houses and Eco-building" has been preparing highly qualified building construction managers with knowledge and skills suitable for the Latvian construction strategy. The study programme has been developed and improved in cooperation with construction companies operating in Latvia and those that provide their services within Northern Europe and Europe, as well as taking into account today's topicalities in ensuring energy efficiency and the need to introduce sustainable construction. In addition to the knowledge and competencies required for a construction manager, students can acquire in-depth knowledge of the construction of sustainable, wooden houses and the use of eco-materials. These are centuries-old traditions and a heritage of wooden construction combined with modern, digital understanding.

The content of the study programme "Construction of Wooden Houses and Eco-building" (41582) corresponds to the strategic goals of construction in the European Union and Latvia and will help striving for long-term sustainability in the next period of development.

The programme updating process was carried out as a series of co-creation workshops which were attended by course lecturers, practicing building construction managers, lecturers of the new courses, and representatives of the ViA administration.

Along with the re-accreditation of the programme, the name of the programme is changed to **"Sustainable Building Construction"**, as well as the scope of the programme is increase from 100 **to 120 credit points** (CP) while the duration of studies – from 2.5 **to 3 years**, adapting the programme content and structure to the current occupational standard "Building Construction Manager" approved at the meeting of the Tripartite Cooperation Sub-Council of Vocational Education and Employment on 2 August 2021.

Other changes also result from the above and are described in detail in the programme development plan *(refer to Annex 6)* and in the sections of the report that relate to the analysis of the updated programme:

- Current events and trends in the industry;
- Course paper integration into the qualification paper;
- Increasing the amount and scope of internship;
- Organizational, procedural and marketing innovations;
- Research and science focus points and a roadmap, motivation of students and lecturers.

3.1.2. Analysis and assessment of the study programme compliance with the study field. Analysis of the interrelation between the code of the study programme, the degree, professional qualification/professional qualification requirements or the degree and professional qualification to be acquired, the aims, objectives, learning outcomes, and the admission requirements. Description of the duration and scope of the implementation of the study programme (including different options of the study programme implementation) and evaluation of its usefulness.

Since 2013, until the submission of the self-assessment report, the amount of the first level professional higher education full-time study programme “Construction and Wooden Houses Eco-building” (Code granted by the Ministry of Education and Science 41582) of the study field “Architecture and Construction” is 100 CP, the length of studies is 2.5 years. The qualification to be acquired – Construction Manager (Occupational Standard is approved at the meeting of the Tripartite Cooperation Sub-Council of Vocational Education and Employment on 26 January 2010, protocol No.1).

The aim of the study program is to prepare highly qualified, competent and competitive building construction managers, responding to the industry's demand for modern and advanced specialists, which would increase the productivity and competitiveness of construction companies both locally and internationally.

Students who have successfully fulfilled the requirements specified in the education programme and successfully passed the State final examination, receive the first-level professional higher education diploma, obtaining the qualification “Construction Manager”, and are prepared to perform practical tasks. Upon obtaining the 1st level professional higher education diploma of a construction manager and upon having practical work experience of 3 years, it is possible to obtain a certificate of construction practice. The conditions under which a certificate for independent practice in the field of architecture and construction is issued, registered and revoked, as well as the procedure for the issue, registration and revocation, suspension and renewal of a construction specialist certificate is laid down in the Cabinet Regulations No. 610 “On Assessing Competence of Construction Specialists and Rules for Monitoring Practice” of 07.10.2014.

Along with the re-accreditation, the name of the programme is changed to “Construction of Sustainable Buildings”, as well as the amount of the programme is increased from 100 CP to 120 CP, adapting the programme content and structure to the current occupational standard “Building Construction Manager” approved at the meeting of the Tripartite Cooperation Sub-Councils of Vocational Education and Employment on 2 August 2021.

Refer to the annex for the conformity assessment of the programme “Construction of Sustainable Buildings” with the occupational standard “Building Construction Manager” (see Annex 26).

Refer to the annex for the Sample of the diploma and its supplement to be issued for mastering the study program (see Annex 23).

3.1.3. Economic and/ or social substantiation of the study programme, analysis of graduates' employment.

The development of the study program at Vidzeme University of Applied Sciences is based on the demand, which is reflected in the development strategy of the Latvian construction industry for 2017–2024. which envisages an increase in the demand for qualified specialists by up to 45% in 2030.

Although the strategy has not been renewed since 2017, it is already clear that the Latvian construction sector is in danger of overheating in the next planning period with the influx of new EU funds and the implementation of large-scale projects not only in Latvia but also in the Baltics (AS Swedbank, 4th quarter economic review). Such projects include Rail Baltica, which directly affects the Vidzeme region and opens opportunities to increase the competitiveness of the region's construction companies. This study program aims to contribute to help to increase competitiveness for regional companies.

Along with globalization and introduction of international, larger-scale projects in Latvia and the free flow of labor, the industry shall be analyzed on a larger scale but considering that the study program is not currently offered in the international education market and is organized in Latvian language mainly, its comparison is limited to Latvia. According to the data of the Higher Education Quality Agency 2019/2020. The field of study Architecture and Construction is represented in 7 HEI's with a total of 39 accredited study programs. The study program, where the qualification of a "building construction manager" can be obtained, is accredited in 5 HEI's: Vidzeme University of Applied Sciences, Latvia University of Agriculture, Rēzekne Academy of Technology, Riga Construction College and Riga Technical University. Although Riga Technical University has a branch in Cesis, it does not offer a program in the field of study "Architecture and Construction". Currently, Riga Technical University offers the program "Construction Management" in its branches in Daugavpils and Liepaja. In conclusion, ViA is the only HEI in the entire Vidzeme region that offers higher education in construction.

A survey of graduates is conducted every year to find out the satisfaction of graduates with the quality of studies and applicability to field. In general, within the framework of study field and program, the employment of graduates after graduation is high, which proves that the study program has already been able to provide construction companies with specialists.

3.1.4. Statistical data on the students of the respective study programme, the dynamics of the number of the students, and the factors affecting the changes to the number of the students. The analysis shall be broken down into different study forms, types, and languages.

The study programme is implemented in Latvian as full-time studies. For the first time, students were admitted to the programme in 2011. Students were not admitted in the academic year of 2019/2020 because the programme underwent an interim assessment and evaluation upon the initiative of ViA in which no significant drawbacks were found. Students were not also admitted in the academic year of 2021/2022 as significant changes to the study programme and the accreditation process were expected. This decision was made in order not to mislead potential students and to start admission in the re-accredited programme without affecting the study plan of the students already in the programme. Analyzing the enrolment data in general, it can be concluded that students apply only for the State funded study places at the time of admission.

During the reporting period, there were 38 students in the programme on average with an average annual dropout of 22 %. It should be pointed out that dropout is affected by the years when no new students were admitted. Excluding the years when students were not admitted, the dropout rate is 15 %. The most common reasons for student dropout are as follows: non-fulfilment of academic obligations (60 % of all exmatriculated students in the reporting period), 32 % – upon their own wish, mainly due to the inability to combine studies with work. Observations of the study administration processes show that timely settlement of study obligations is also affected, to a large extent, by students’ professional activity, as students give preference to a paid job. Other cases of exmatriculation are related to students’ failure to pass the final examinations (to write and defend the qualification paper) within the deadlines specified by ViA.

Refer to the annex for Student statistics in the reporting period (see Annex 2).

3.1.5. Substantiation of the development of the joint study programme and description and evaluation of the choice of partner universities, including information on the development and implementation of the joint study programme (if applicable).

3.2. The Content of Studies and Implementation Thereof

3.2.1. Analysis of the content of the study programme. Assessment of the interrelation between the information included in the study courses/ modules, the intended learning outcomes, the set aims and other indicators with the aims of the study course/ module and the aims and intended outcomes of the study programme. Assessment of the relevance of the content of the study courses/ modules and compliance with the needs of the relevant industry, labour market and with the trends in science on how and whether the content of the study courses/ modules is updated in line with the development trends of the relevant industry, labour market, and science.

The study courses are developed in accordance with the required knowledge, skills and competencies laid down in the occupational standard, and are supplemented with current industry topicalities and expected knowledge, skills and competencies which reflect the needs of advanced and export-capable companies of the industry. The study courses are organized in accordance with the regulatory enactments effective in the country and the quality standards established by ViA in the organization of the study process.

Study methods include:

- In-person/online contact classes with lecturers, including fieldwork or practical work under the supervision of a lecturer;
- Independent work before/after classes;
- Field trips, visits to companies and construction sites;
- In-service training and internship at a construction company.

The main methods of in-person classes: lectures; practical classes, laboratory demonstrations, fieldwork which can be a group work and individual work of different formats – situation analysis, practical adaptation of theoretical models, discussions, presentations of independent work, seminars, tests, team building activities, simulations of real situations, etc.;

Independent work – homework, research, preparation of reports, accounts, preparation for seminars, final examinations, presentations, literature studies, calculations, etc.

Field trips – experience exchange visits to companies and organizations. Problem-based and example-based training is widely used in training. Field trips are compatible with cooperation companies, organizations, as well as Valmiera city and Vidzeme planning region.

Internship – the purpose is to give a student an opportunity to test knowledge, apply the skills acquired

and develop competences in practice.

The content of the study courses integrates all the points that are laid down as priorities to be implemented in the development strategy of the Latvian construction industry for 2017–2024. Digitization and use of ICT have been introduced in courses such as BIM I and BIM II, Construction Organization and Management, BIS, HR Management and Project Management, Building Design Principles I and II, Construction of Wooden Houses and Eco-building, Energy Efficiency, besides, students go through digitization aspects during internship. Smart manufacturing and passive house construction is integrated in such courses as Building Design Principles I and II, Sustainable Development, Construction Products and Eco-building Materials, Construction of Wooden Houses and Eco-building, Energy Efficiency. Energy efficiency is covered even in a separate study course in the amount of 3 CP.

The programme provides knowledge, skills and competencies in accordance with the current occupational standard “Building Construction Manager”, as well as additional knowledge, skills and competencies in such study courses as “European Green Course. Green Public Procurement”, “Introduction to Fire Safety in Buildings” and “Labour Safety and Electrical Safety”.

The study courses are developed to achieve the results set for the study programme in terms of knowledge, skills and competencies.

Knowledge:

1. Understanding of building processes, aspects of physical forces, material resistance, building structures, thermal physics, building acoustics and energy efficiency, as well as aspects of fire safety in buildings.
2. Understanding of the management of the building process (including the BIS system), the role of the construction manager, technical inspection, the sequence of construction work on the construction site, the regulatory framework, types, composition and application of construction products; organization of the use and flow of construction machinery; labour safety rules and procedures.
3. In-depth understanding of the principles of sustainable design and construction which include building’s life cycle calculations, traceability of construction products, environmental protection.

Skills:

1. Ability to perform calculations of building strength and energy efficiency, geodetic measurements with the latest equipment, and the knowledge of the building climatic parameters and fire safety principles.
2. Ability to analyze a construction project in BIM and 3D environment, identify risks, draw up a work plan, perform cost estimation; prevention of labour safety risks and application of OCMA and regulatory enactments.
3. Ability to apply knowledge of the principles of sustainable construction and process management in practice, to propose recommendations for efficient and sustainable construction process management.

Competences:

1. Comprehensive analysis of construction processes, taking into account and encouraging the use of sustainable solutions.
2. Ability to debate and present arguments and to lead a construction team; ability to find the necessary information, assess it critically and analytically and the knowledge of the information and regulatory space of the industry in Latvian and English.
3. Ability to apply construction digitization tools and information systems, students know how to follow the progress of the industry and promote the company’s competitiveness; they know how

to prepare a building for commissioning.

In addition to the requirements for the “Building Construction Manager” laid down in the occupational standard, the study programme “Construction of Sustainable Buildings” includes the following courses:

- Introduction to Fire Safety in Buildings - The goal of the course is to provide students with the basic knowledge of fire safety solutions and design principles of buildings in order to understand the content of the building design and to assess its compliance with fire safety principles, as well as to recommend project changes to improve fire safety in the building. The course covers fire safety risks in buildings, protection methods and technologies, properties of material during exposure to fire, conformity assessments of construction product properties and regulatory documents.
- Labour Safety and Electrical Safety in Construction - The goal of the course is to provide construction managers with specific knowledge of construction work risk factors and other issues related to labour safety, as well as to develop skills and abilities to manage and organize the necessary labour protection measures during construction by help of virtual reality technology simulations and other modern training methods to raise awareness of specific labour safety measures when working at height, operating electric forklifts and lift trucks, when working with electricity, when operating cranes, hoists for lifting people, when handling chemicals and asbestos.

After completing this course, students obtain a certificate of completion of the basic and specialized courses in the field of labour safety in “CONSTRUCTION, MINING AND QUARRING”; after fulfilling the additional criteria, students have an opportunity to obtain a certificate of a labour protection specialist in cooperation with a certified training center SIA “Mācību Alianse”, the head of which is also a lecturer of the specialized course.

Furthermore, detailed course additions have been made by adding such themes as cyber security of buildings and construction process; BREEM, LEAN certification.

Refer to the annex for Informative report on the compliance of the study program with the state education standard (see Annex 25).

Refer to the annex for Informative report on the compliance of the qualification obtained in the study program with the professional standard (see Annex 26).

Refer to the annex for Study program plan (see Annex 27).

Refer to the annex for Descriptions of study courses of the study program (see Annex 28).

Refer to the annex for Mapping of study courses to achieve the study results of the study program (see Annex 29).

3.2.2. In the case of master’s and doctoral study programmes, specify and provide the justification as to whether the degrees are awarded in view of the developments and findings in the field of science or artistic creation. In the case of a doctoral study programme, provide a description of the main research roadmaps and the impact of the study programme on research and other education levels (if applicable).

3.2.3. Assessment of the study programme including the study course/ module

implementation methods by indicating what the methods are, and how they contribute to the achievement of the learning outcomes of the study courses and the aims of the study programme. In the case of a joint study programme, or in case the study programme is implemented in a foreign language or in the form of distance learning, describe in detail the methods used to deliver such a study programme. Provide an explanation of how the student-centred principles are taken into account in the implementation of the study process.

Academic obligations and their fulfillment requirements are laid down in each study course description.

The course description is written in accordance with the guidelines approved by the vice-rector for academic and scientific affairs, it is submitted to the director of the study field, who, according to the proposal of the council of the field, submits it for approval to the assembly of the faculty.

The results of student performance are controlled and evaluated:

- during the semester,
- by means of examinations after full acquisition of the study courses,
- according to skills and competences acquired during internship,
- after full acquisition of the study programme,
- by means of the State examination (qualification paper).

The purpose of each examination is to determine the level at which a student has acquired knowledge, obtained skills and competencies, as well as his or her ability to apply them when performing the tasks required in professional activity (practice). Evaluation criteria are developed for each course providing for different forms and types of examination. Students take an examination in all courses of the study programme. Requirements and criteria for the examination are selected by the course lecturer; mostly, the evaluation is based on a cumulative system, i.e., final assessment is summed up from several student assignment evaluations during the course. There is a so-called “anchor subject” in each semester, and students write a course paper in this subject. Requirements of other courses taught in that semester are subordinated to the task, form and type of the course paper.

During the semester, theoretical knowledge and skills of the students acquired in study courses are assessed and evaluated by the results of their individual academic performance: a course paper, tests, reports, participation in discussions, seminars, tests.

The study courses are organized in accordance with the regulatory enactments and the high standards established by ViA in the course of the study process.

The study programme is implemented by means of contact classes and independent work. Students acquire theoretical knowledge in lectures, seminars and while performing independent studies of literature. Practical skills required for the construction manager are developed and improved under the guidance of experienced specialists of the field by means of practical work, field work, laboratory demonstrations, field trips, as well as during internship at construction companies in the amount of 20 CP.

Students’ independent work is an important part of the study process. Within the framework of the study courses, students write tests, develop and present study projects. At the end of each study course, students take a written or oral examination and/or write a research paper which must prove the theoretical knowledge and students’ abilities and skills to systematize and apply it in research projects.

Qualification paper is an independent research paper written by a student. During its development,

students summarize the theoretical knowledge acquired in various study courses. The qualification paper must confirm the student's ability and skills to integrate the theoretical knowledge acquired in different study courses, skills and abilities acquired in the study process, to develop recommendations for the implementation of the results in practice.

The goal of the programme is to maximally integrate practical activities in the study process and to provide students with a study and educational platform on which they can deepen their knowledge, develop practical skills and competencies. Therefore, the study plan of the programme is compiled by selecting the so called "anchor subjects" in each semester. The anchor subjects are courses of 4 CP, and the knowledge, skills and competencies to be acquired in these courses are essential for writing the qualification paper. There is an anchor subject and "support" subjects in each semester. The lecturers adapt the content, relevant examples, tests, homework of "support" subjects according to the needs of the anchor subject and the qualification paper themes chosen by the students. Thus, the qualification paper becomes the main guiding principle of the study process, and its architecture is developed already during the study process. This approach allows to "build" understanding gradually and consolidate knowledge, thus allowing students to explore deeper the subject of their qualification papers and strengthening their motivation and research interests for future studies and professional development.

In collaboration with cooperation companies and practicing lecturers, students have an opportunity to choose the qualification paper designs for Group 3 buildings already in the 2nd semester of the 1st year within the study course "Principles of Building Design I". The designs proposed are buildings from all over the world built in different climatic conditions and with different specifics that meet the principles of modern sustainable building design, these buildings are available in the form of electronic .ifc files.

When choosing qualification papers as the guiding principle of the studies, it also largely marks the cooperation groups of the teaching staff and the "key" lecturers who will also take on the roles of the qualification paper supervisors. These lecturers become the mentors of the students throughout the study period thus enabling ViA to maintain feedback with students after graduation and strengthening also the alumni community.

During in-person classes the following assets can be used: a multimedia projector and the Internet, virtual reality glasses, TV, video, computer classrooms and a multimedia laboratory or library resources. The use of high-quality Internet resources is gaining an increasing role in the study process, and lecturers use both the Internet materials and other types of resources in their work.

Due to limitations caused by Covid-19 pandemic, many lectures were held online using the Webex platform (until 2022), and in October 2021 a transition to MS Office – MS Teams took place.

Acquisition of practical skills is controlled by using practical assignments – analytical and critical tasks, laboratory demonstrations, drawings, calculations, internship. Each form of knowledge and skill assessment is a component of the overall examination system and has a certain share in the final evaluation. The examination forms during the semester are chosen to motivate students to work on a regular basis and systematically.

Special emphasis should be placed on the study course result and internship task synchronization, for example, Internship I (2nd semester of the 1st year) covers a range of knowledge, skills and competencies acquired in the 1st year of the study programme, as well as provides a practical insight into the courses of the 1st semester of the 2nd year; the same principle is applied to Internship II and Internship III. Internship allows to consolidate the knowledge acquired and to build the basis for the next courses. The internship report is also evaluated by the internship defence commission consisting of three members.

The following fundamental principles of evaluation which correspond to the principles of Vidzeme University of Applied Sciences are applied in the study programme courses:

1. The principle of summing up positive achievements – the acquired education is evaluated by summing up positive achievements;

2. The principle of mandatory evaluation – it is necessary to acquire a positive evaluation for the acquisition of the mandatory content included in the primary components of the programme;
3. The principle of openness and clarity of requirements – in accordance with the objectives and tasks set out in the programme, an aggregate of the primary requirements is specified for the evaluation of the education acquired;
4. The principle of appropriateness of evaluation – in an examination the opportunity is given to affirm analytical and creative capabilities, knowledge, abilities and skills in appropriate tasks and situations for all levels of acquisition. The scope of the content included in an examination shall comply with the content specified in the course programmes and the requirements for abilities and knowledge specified in the educational standard.

The final evaluation of the study course may include an assessment of the student performance throughout the study course, for example: participation and quality of work in lectures, seminars and practical classes, test results, results of independent homework, test or examination grades.

Student's independent written assignment can be an exercise, a report, a case study, analysis of a publication, compilation of factual materials and evaluation. Information on the conditions and requirements for the final examination of the study course is laid down in the study course description under the section "Requirements for obtaining credit points and criteria for learning outcome evaluation".

All information and requirements for the development and defence of the qualification paper are summarized in the ViA Methodological Guidelines *(see Annex 30).*

Refer to the annex for Qualification Paper Assignment (see Annex 31).

3.2.4. If the study programme envisages an internship, describe the internship opportunities offered to students, provision and work organization, including whether the higher education institution/ college helps students to find an internship place. If the study programme is implemented in a foreign language, provide information on how internship opportunities are provided in a foreign language, including for foreign students. To provide analysis and evaluation of the connection of the tasks set for students during the internship included in the study programme with the learning outcomes of the study programme (if applicable).

Within the study programme, there is internship planned in the amount of 20 CP (it is by 2 CP more than before accreditation) which is divided into three parts, the internship tasks are adjusted to the current and next study semester:

- Internship I - training practice in a construction company, amount – 4 CP;
- Internship II in construction company , amount – 6 CP;
- Internship III in construction company, amount – 10 CP.

Internship is completed outside ViA (at places of internship) at the private and public organizations of the construction industry under supervision of experienced specialists. The internship goal is to provide an opportunity for students to practice skills and abilities necessary for a construction manager in a real work environment in Latvia and Europe. During internship, a student fills in the diary and prepares an internship report and public presentation in accordance with the internship regulations and annexes thereto.

The final assessment of internship is made up from the evaluation given by the internship supervisor (at

the place of internship), the evaluation of the internship report materials submitted by the student, and the evaluation of the student's public presentation which is assessed by a specially selected internship report commission in accordance with the Internship Regulations.

After the accreditation, changes are made in the study programme and the total number of credit points for internship is increased by 2 CP – from 18 CP to 20 CP, the course "Practical Construction Works I" (4 CP) is restructured into Internship I (4 CP) (in-service training) at the company SIA "Pavasars Housing". Upon successful completion of internship at this company, students have the opportunity to obtain a certificate confirming practical acquisition of the specialized software *Dietrichs*.

For detailed information on the internship tasks and their connection with the study programme plan refer to the Internship Regualtions and the Study Programme Plan in the Annex (see Annex 32).

3.2.5. Evaluation and description of the promotion opportunities and the promotion process provided to the students of the doctoral study programme (if applicable).

3.2.6. Analysis and assessment of the topics of the final theses of the students, their relevance in the respective field, including the labour market, and the marks of the final theses.

The themes of the qualification papers are chosen by the students on a voluntary basis. Every year the programme director conducts a survey of the region's municipalities and regional cooperation partners compiling themes relevant to the field and the region, afterwards those themes are offered to the students. Students' qualification papers address various challenges of the construction industry. A large part of the qualification papers focus on the objects located in Vidzeme planning region, for example, "1st and 2nd Stage Reconstruction of Valmiera Viesturs Secondary School", "Newly Built Boarding School at Dakteru Street 27, Smiltene, Latvia", "Construction of a Hostel in Cēsis", some of the objects are located directly in the property of local governments. Thus, the study process and qualification papers are closely related to the students' places of internship and also help solve the challenges of local governments and strengthen the principles of sustainable construction.

Qualification papers are based on the analysis of a real construction project and the development of its construction process. Within the framework of the qualification papers a work performance project is prepared, additional calculations, inspections and detailing are made, construction estimates are reviewed, providing recommendations for construction cost and energy efficiency optimization. The paper is written in accordance with the applicable regulations regulating construction and building legislation, as well as in accordance with the guide for preparation of the graduation papers.

The goal of the programme "Construction of Sustainable Buildings" is to maximally integrate practical activities in the study process and to provide students with a study and educational platform on which they can deepen their practical knowledge and develop their skills and competencies. Therefore, the study plan of the programme is compiled by selecting the so called "anchor subjects" in each semester. The anchor subjects are courses of 4 CP, and the knowledge, skills and competencies to be acquired in these courses are essential for writing the qualification paper. There is an anchor subject and "support" subjects in each semester plan. The lecturers adapt the content, relevant examples, tests, homework of "support" subjects according to the needs of the anchor subject and the qualification paper themes chosen by the students. Thus, the qualification paper becomes the main guiding principle of the study

process and its architecture is developed already during the study process. This approach allows to “build” understanding gradually and consolidate knowledge, thus allowing students to explore deeper the subject of their qualification papers and strengthening their motivation and research interests for future studies and professional development.

In collaboration with co-operation companies and practicing lecturers, students have an opportunity to choose the qualification paper designs for Group 3 buildings already in the 2nd semester of the 1st year within the study course “Principles of Building Design I”. The designs proposed are buildings from all over the world built in different climatic conditions and with different specifics that meet the principles of modern sustainable building design, these buildings are available in the form of electronic .ifc files.

Students can still choose a theme of interest on their own, but it must be agreed with the director of the study programme.

Refer to the annex for the List of themes of the qualification paper of the graduates and their evaluation (2014 - 2021) (see Annex 34).

3.3. Resources and Provision of the Study Programme

3.3.1. Assessment of the compliance of the resources and provision (study provision, scientific support (if applicable), informative provision (including libraries), material and technical provision, and financial provision) with the conditions for the implementation of the study programme and the learning outcomes to be achieved by providing the respective examples.

Resources and assets of the study programme are based on the resources and assets of the study field and are described in detail *in Part II, Chapter 2.3. "Resources and provision of the study field".* In addition to the above, e-environment is actively used in the study process, where study course materials, course schedules, etc. can be found. The MS Teams platform, Webex, Skype, Zoom (until February 2022), as well as the open source remote access platform for practical demonstrations are used to conduct online lectures.

The resources (including financial resources) and material and technical assets available for the study field provide for a high-quality implementation of the study programme and are relevant to the study content and allow to organize the study process successfully.

Additional resources and assets are provided by using resources and laboratories of the other programmes (cyber security, virtual reality) of the Faculty of Engineering. For example, the study course “Labour Safety and Electrical Safety in Construction” is organized using virtual reality simulation software which allows to have an in-depth understanding and experience of construction safety aspects.

For details on the use of other laboratories and resources of the Faculty of Engineering, refer to *Part II, Chapter 2.3. "Resources and provision of the study field".*

In order to achieve learning outcomes, students are supported by the director of the study programme, lecturers, guest lecturers, internship supervisors (both at the company and ViA) and other employees of the administrative staff of the faculty. The support of the administrative and technical staff is sufficient to ensure the achievement of learning outcomes.

Resources for the implementation of the programme are also available from the companies of the

industry with which cooperation agreements have been entered into. For example, in the academic year of 2021/2022, students could perform practical work of the study course “Geodesy” using the latest generation laser surveying equipment (which was provided to the students by the company SIA “3D Engineering”) practically at the construction site.

3.3.2. Assessment of the study provision and scientific base support, including the resources provided within the framework of cooperation with other science institutes and higher education institutions (applicable to doctoral study programmes) (if applicable).

3.3.3. Indicate data on the available funding for the corresponding study programme, its funding sources and their use for the development of the study programme. Provide information on the costs per one student within this study programme, indicating the items included in the cost calculation and the percentage distribution of funding between the specified items. The minimum number of students in the study programme in order to ensure the profitability of the study programme (indicating separately the information on each language, type and form of the study programme implementation).

Refer to Part II, Chapter 2.3., Sub-chapter 2.3.1.

3.4. Teaching Staff

3.4.1. Assessment of the compliance of the qualification of the teaching staff members (academic staff members, visiting professors, visiting associate professors, visiting docents, visiting lecturers, and visiting assistants) involved in the implementation of the study programme with the conditions for the implementation of the study programme and the provisions set out in the respective regulatory enactments. Provide information on how the qualification of the teaching staff members contributes to the achievement of the learning outcomes.

During the reporting period, there were on average 13-17 lecturers in the study programme. In order to ensure the most direct link with current events in the field, detailed acquisition of particular themes, and practical insight, several courses have more than one lecturer, thus only improving the transfer of knowledge to the students.

After accreditation, the study programme is taught by 17 lecturers, ten of whom are newly recruited lecturers; the Letters of Intent on teaching the courses are entered into with them.

Table 9. Lecturers of the study program (2022)

No.	Lecturer	Position	Courses
1.	Dr.ing. A. Vilguts	**assistant professor**	Mechanics of Construction and Resistance of Materials (2 CP), Building Structures I (wooden) (2 CP), Wooden Houses and Eco-building (4 CP); Building Structures II (metal) (2 CP) and Building Structures III (concrete, masonry) (2 CP); Building Engineering Physics and Building Acoustics (2 CP)
2.	Dr.sc.ing. Jana Simanovska	**researcher,** guest assistant professor	Sustainable Development (2 CP). Construction Products and Eco-building materials I (2 CP), European Green Course. Green Public Procurement (2 CP), Construction Chemistry. Safe Handling of Chemicals (2 CP)
3.	Dr.math. Aija Cunska	**researcher,** guest assistant professor	Higher Mathematics (4 CP)
4.	Mg.sc.ing. Dace Krutova	**lecturer**	Construction Products and Eco-building Materials I (2 CP) and II (2 CP), Construction Economics and Estimating (2 CP), Quality Management Systems and Conformity Assessment in Construction (2 CP).
5.	Dr.sc.ing. Sandijs Mešķis	guest assistant professor	Introductory Course in Engineering Geology (2 CP), Practical Field Work in Engineering Geodesy (Land Surveying) (2 CP)
6.	Mg.math.ing., Mg.iur. Ojārs Bāliņš	guest lecturer	Labour Protection and Civil Defence and First Aid (2 CP)
7.	Mag.paed. Santa Laurīte	guest lecturer	Professional English I (2 CP) and II (2 CP)
8.	Mg.oec. Jānis Bikše	**lecturer, research assistant**	Business Fundamentals (incl. logistics) (2 CP)
9.	Mg.sc.ing. Krišjānis Zaķis	guest lecturer	Building Information Modelling I (2 CP) and II (2 CP)

10.	Mg. arh.ing Marija Katrīna Dambe	guest lecturer	Principles of Building Design I (2 CP) and II (2 CP); Law and Standards of the Industry (2 CP); Construction Project Organization, Management, BIS (4 CP)
11.	Mg.sc.soc., Mg.oec. Inese Ebele	**lecturer**	HR Management (2 CP); Project Management (2 CP)
12.	Mg. sc. ing. Jānis Rancāns	guest lecturer	Engineering Networks I (HVAC) (2 CP); Engineering Networks II (WS) (2 CP)
13.	Mg. Madara Brice	guest lecturer	Labour Safety and Electrical Safety in Construction (2 CP)
14.	Mg.sc.ing. Valdis Zaķis	**assistant professor, researcher**	Energy Efficiency (4 CP), Sustainable Construction (2 CP)
15.	Mg.sc.ing. Edvīns Grants	guest lecturer	Introduction to Fire Safety in Buildings (2 CP)
16.	Mg. gr. Andrejs Ļebedevs	guest lecturer	Construction Technologies, Construction Machinery and Equipment I (2 CP) and Construction Technologies, Construction Machinery and Equipment II (2 CP); Technical Inspection of Buildings (2 CP); Building Commissioning (2 CP)
17.	Bc. arh. ing Gunita Ķiesnere	guest lecturer	Introduction to the Specialty (2 CP)

In future, it is planned to maintain the above teaching staff in the programme. According to the study programme plan, each semester has “anchor subjects” of 4 CP, and the lecturers of these courses form the main core in each semester supporting students in the development of their qualification papers.

Both the elected academic staff and the invited lecturers – industry professionals, experts are involved in the implementation of the study programme. ViA academic staff has a Master’s degree or higher level education and at least ten years of practical experience in the industry (both in Latvia and abroad), thus, meeting the conditions for the implementation of the study programme. The renewed team of lecturers bring their share of international experience and current knowledge in the study programme, especially in the main “anchor” subjects of the programme.

The involvement of industry professionals is important as it provides a vision of the industry’s development trends, current events, required skills and abilities that students need to be better prepared for the demands of the labour market. The elected academic staff works also in the construction industry.

During the reporting period, the study programme had an average of six elected lecturers, although their composition has changed. At the end of the reporting period, positions of seven elected lecturers were kept.

The qualification of the teaching staff, especially the professional qualification of the lecturers of "anchor

courses", expertise, experience in the industry, as well as leadership, management skills and presentation skills clearly help to achieve the results of the study program at the level of knowledge and skills. In addition, the results of each course are structured to help achieve the results of the program as a whole, covering several of the results within the course. The qualification of the teaching staff, the strengths are used to provide the maximum added value in achieving the results of the program

Refer to the annex for Basic information about the teaching staff involved in the implementation of the study field (see Annex 16).

Refer to the annex for the Biographies (CV) of the teaching staff involved in the implementation of the study field (see Annex 17).

Refer to the annex for the Agreements of intent of guest lecturers involved in the implementation of the study field (see Annex 33).

3.4.2. Analysis and assessment of the changes to the composition of the teaching staff over the reporting period and their impact on the study quality.

See Part III, Section 3.4, Sub-paragraph 3.4.1.

3.4.3. Information on the number of the scientific publications of the academic staff members, involved in the implementation of doctoral study programme, as published during the reporting period by listing the most significant publications published in Scopus or WoS CC indexed journals. As for the social sciences, humanitarian sciences, and the science of art, the scientific publications published in ERIH+ indexed journals or peer-reviewed monographs may be additionally specified. Information on the teaching staff included in the database of experts of the Latvian Council of Science in the relevant field of science (total number, name of the lecturer, field of science in which the teaching staff has the status of an expert and expiration date of the Latvian Council of Science expert) (if applicable).

3.4.4. Information on the participation of the academic staff, involved in the implementation of the doctoral study programme, in scientific projects as project managers or prime contractors/ subproject managers/ leading researchers by specifying the name of the relevant project, as well as the source and the amount of the funding. Provide information on the reporting period (if applicable).

3.4.5. Assessment of the cooperation between the teaching staff members by specifying the mechanisms used to promote the cooperation and ensure the interrelation between the study programme and study courses/ modules. Specify also the proportion of the

number of the students and the teaching staff within the study programme (at the moment of the submission of the Self-Assessment Report).

Starting from 2020/2021, the so-called “synchronization meetings” have been introduced at the beginning of each semester, in which both the lecturers of the current semester and the lecturers of the anchor subjects of the next semester participate. The goal of the meeting is to ensure a clear and unified learning process within the course and a transition between semesters to complete the stydy process by a properly written qualification paper.

Within the framework of the meeting, the lecturers decide on joint course paper assignments and proper scope of performance, so as to provide the most effective and focussed training for students, and to avoid unnecessary overlapping workload and course fragmentation during the semester. Also, a list of potential guest lecturers is made which would help practically cover the topics to be studied in the semester.

This method ensures that lecturers listen to each other and act as a team, sharing training methods with each other. It improves the topicality of the entire study programme and promotes the introduction of modern teaching methods in practice, thus, helping students acquire the subject better by making efficient use of their study time.

For lecturers to have the opportunity to improve their academic work and to implement the supervision of the quality of academic work, the ViA implements various activities, incl. study course assessment surveys and study opportunities for hospitation. For the improvement of professional qualification of lecturers, including guest lecturers, ViA regularly organizes various seminars and conferences. Pedagogical innovations are one of the transversal topics also in the implemented European Social Fund project "Improvement of academic staff and human resources development of Vidzeme University of Applied Sciences" (2018 -2022) (SAM 8.2.2.), within the framework of which the Manual of the ViA lecturer was also created to help in everyday work both for lecturers who start their work at the ViA and for experienced and long-term colleagues. The handbook provides an insight into the basic information required by the lecturer, including stories of good practice and experience of academic work, with the aim of providing support to both elected academic staff and visiting lecturers.

There are 17 lecturers involved in the implementation of the programme. The ratio of the teaching staff and students at the time of submitting the self-assessment report is 1.

Annexes

III - Description of the Study Programme - 3.1. Indicators Describing the Study Programme		
Sample of the diploma and its supplement to be issued for completing the study programme	23P-IĒB-Diploma-paraugs_CSB-Example-of-Diploma-precizejums-correction-05042022.zip	23P-IĒB-Diploma-paraugs_CSB-Example-of-Diploma-precizejums-correction-05042022.zip
For academic study programmes - Opinion of the Council of Higher Education in accordance with Section 55, Paragraph two of the Law on Higher Education Institutions (if applicable)		
Compliance of the joint study programme with the provisions of the Law on Higher Education Institutions (table) (if applicable)		
Statistics on the students in the reporting period	2P-Student-statistic-2013-2021-ArhConstr-red27042022.xlsx	2P-Studentu-statistika-2013-2021-ArhBuv-red27042022.xlsx
III - Description of the Study Programme - 3.2. The Content of Studies and Implementation Thereof		
Compliance with the study programme with the State Education Standard	25P-IĒB-atbilstība valsts izglītības standartam-ENG2021-corr20042022.docx	25P-IĒB-atbilstība valsts izglītības standartam-LV2021_red20042022.docx
Compliance of the qualification to be acquired upon completion of the study programme with the professional standard or the requirements for professional qualification (if applicable)	26P-CSB-compliance-profession-standard-2021.xlsx	26P-IĒB-atbilstība-profesijas-standartam-2021.xlsx
Compliance of the study programme with the specific regulatory framework applicable to the relevant field (if applicable)		
Mapping of the study courses/ modules for the achievement of the learning outcomes of the study programme	29P-Studiju-rezultatu-kartejums-IĒB-Study-results-CSB-2021-red-corr-27042022.xlsx	29P-Studiju-rezultatu-kartejums-IĒB-Study-results-CSB-2021-red-corr-27042022.xlsx
The curriculum of the study programme (for each type and form of the implementation of the study programme)	27P-Studiju-programmas-plans_2022_LV-Study-program-plan_2022-ENG_red-corr19042022.xlsx	27P-Studiju-programmas-plans_2022_LV-Study-program-plan_2022-ENG_red-corr19042022.xlsx
Descriptions of the study courses/ modules	28P-CSB-study course description-27022022.zip	28P-IĒB-studiju-kursa-apraksti-27022022.zip
Description of the organisation of the internship of the students (if applicable)	32P-2022_Prakses nolikums_llgtspējīgu ēku būvniecība_10.02.2022_ENG.docx	32P-2022_Prakses nolikums_llgtspējīgu ēku būvniecība_10.02.2022_LV.docx
III - Description of the Study Programme - 3.4. Teaching Staff		
Confirmation that the academic staff of the doctoral study programme includes not less than five doctors, of which at least three are experts approved by the Latvian Council of Science in the branch or sub-branch of science in which the study programme intends to award a scientific degree (if applicable)		
Confirmation that the academic staff of the academic study programme complies with the requirements specified in Section 55, Paragraph one, Clause 3 of the Law on Higher Education Institutions (if applicable)		