

Riga Aeronautical Institute Development Plan for 2021 - 2027

1. Introduction

Riga Aeronautical institute (hereinafter referred to as RAI) development plan for 2021 - 2027 (hereinafter referred to as Plan 2021) is a medium-term planning document that determines the succession of RAI development for the next seven years, formulates development goal, tasks and indicators to be achieved as a result of the implementation of the plan.

RAI Plan 2021 has been developed on the basis of the following:

- 1) National development plan for 2021 2027;
- 2) Guidelines for the development of education for 2014 2020;
- 3) Guidelines for the development of transport for 2014 2020.

RAI development plan is determined by the significant contribution of the transportation services sector to the Latvian economy, largely due to the favorable geographical position of Latvia. The guidelines for the development of transport for 2014-2020 emphasize that transport in our country is one of the most strategically important sectors of the economy, which provides transportation of people and cargos, promotes economic growth, as well as creates jobs.

In its turn, it is indicated in the National development plan 2021 - 2027 that the quality of higher education should be strengthened by regular evaluation of the study programs implemented in higher education institutions.

Taking this into account, RAI's vision is to be a professional institute recognized in the Baltic region, which prepares specialists in the field of transport, especially in the field of aviation, and conducts applied research.

In addition to the diploma, RAI aviation field graduates receive a professional training license or certificate, which entitles them to start working in the relevant companies of the sector immediately after graduating from the institute. The right to train students to obtain such a certificate is granted to RAI by a license issued by the European Union Aviation Safety Agency (EASA). RAI regularly carries out audits organized by this agency, which is a confirmation of the quality of education acquired at RAI and compliance with the European Union standards.

RAI mission is to prepare specialists for modern quickly developing industry sectors, in the first place, for aviation and transport services.

2. Description of the current situation

RAI was founded on July 15, 1992 as a joint stock company, reorganizing the Riga Higher Military Aviation Engineering School. RAI is a professional higher education institution that implements professional bachelor's and professional master's study programs, as well as is engaged in applied research.

RAI teaching staff consists of the elected academic staff and contract guest staff. Highly qualified specialists in the Latvian transport sector and lecturers of other higher education institutions who have been elected to an academic position at the respective higher education institution work as guest associate professors or guest lecturers. These lecturers mainly lead

theoretical basic courses in the field and professional specialization courses in the field.

In academic year 2019/2020 RAI employs 55 lecturers, 20 of whom have been elected to the academic position of assistant professor or lecturer. 18 members of the teaching staff hold a doctoral degree. Research work at RAI is organized in a separate structural unit - the Scientific Research Center.

According to RAI development vision, from the beginning of its foundation, the goal of RAI development has not been to increase the number of the study directions and implemented study programs, but to increase the quality of studies and academic work. In this regard, the activities of the institute are aimed at the improving the content of the study programs in cooperation with employers, modernization of infrastructure and information provision, the renewal of current academic staff and raising qualification.

Table 2.1. Study directions and study programs implemented by RAI

No.	Study direction	Study program			
1.	"Information technology, computer technology, electronics, telecommunications, computer control and computer science"	Professional bachelor study program "Electronic equipment maintenance"			
2.	"Mechanics and metalworking, heat energy, heat engineering and mechanical engineering"	 Professional bachelor study program "Aircraft Technical Operation"; Professional bachelor study program "AirTransport Systems Management"; Professional master study program "Transportation Systems Management". 			
3.	Transportation services	Professional bachelor study program "Air Traffic Management"; Professional bachelor study program "International Transportation Logistics"; Professional bachelor study program "International Transportation Company Management"; Professional master study program "International Transportation Company Management".			

Number of RAI students in academic years 2015/16 - 2020/21.

Table 2.2.

Gads	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Number of students	425	345	356	360	333	325

RAI governance structure

Saskaņā ar Augstskolu likumu, RAI Satversmi un pievienoto RAI pārvaldības struktūrshēmu RAI galvenās pārstāvības un vadības institūcijas ir:

- Convent,
- Senate,
- Rector,
- Vice-Rector,
- Dean of the Faculty of Engineering and Management,
- Study programs directors.

RAI management and governance actually take place through the collegial cooperation of the mentioned institutions, as well as by listening to the students' self-government and academic staff.

The Convent is RAI's highest collegial representative and governing body and decision-making body in academic and scientific matters. The Convent is includes 11 representatives.

The Convent elects and removes the Rector, hears the Rector's report on the activities, elects and recalls the Senate, the Audit Commission and the Academic Arbitration Court, approves the regulations of the Senate, the Audit Commission and the Academic Arbitration Court.

The Senate is a collegial staff management institution and decision-making body that approves the procedures and regulations that regulate all areas of activity of RAI. The Senate includes 10 representatives.

Senate:

- reviews and approves all the internal regulations of RAI, except those that fall within the competence of the Convent;
- reviews and approves academic and professional study programs, study plans and work plans;
- reviews research topics and funding structure;
- approves the heads of structural units, methodological council, compositions of various commissions, etc.;
- hears the report of the Vice-Rectors, heads of structural units and other officials on the course of studies and the activities of the relevant services, as well as makes appropriate decisions and recommendations to the Convent.

The main function of the Rector is the administrative management of the institute, which is manifested in the implementation of the decisions of the institute collegial institutions - the Convent and the Senate, in ensuring the activity of these institutions and the institute in accordance with the Law on Higher Education Institutions and other regulatory enactments. The Rector, as the administrative head of the institute, represents the institute in cooperation with the Cabinet of Ministers, the Ministry of Education and Science, the Rectors Council, the Council of Higher Education and other public administration institutions.

In recent years, RAI has significantly improved its quality management and assurance system - a Quality Management Manual, an Operations Organization Manual and RAI Internal Rules of Procedure have been developed and implemented. The Quality Management

Department has been established and the head of the department has been hired.

3. SWOT analysis

Strengths	Weaknesses			
 Development of the practical part of the study program, thus providing the students with an opportunity to obtain a license or a certificate in order to start a career in the spheres which are legislatively regulated by EU; Infrastructure of the Institute, such as land, building and technical facilities, is the property of the Institute; Due to the small number of students, there are ample opportunities in groups to use an individual approach; Good co-operation with employer organizations, involvement of employers in the development and improvement of study programs, examination and diploma thesis defense commissions; Historically, a recognizable specific niche of the Institute has been preserved. 	 ✓ There is no state budget funding; ✓ Insufficient publications of the scientific research activity results, especially in the international sources; ✓ Insufficient student and teaching staff exchange; ✓ Weak commercialization of the scientific activity results. 			
Opportunities	Threats			
 The Institute has extensive experience and wide opportunities for implementing qualification upgrading courses, refresh and continuation courses, attracting additional funding; Increase the number of foreign students; To more widely develop cooperation with the Latvian and foreign universities as well as organizations in the aviation and transport industries; Academic personnel should be more actively involved in the activities of the expert councils, promotion councils and other collective bodies; Increase in the demand for new specialists due to transport sector development. 	 Further decrease in the number of school graduates due to demographic trends; The choice to be made by the school graduates, for example, to study at the state- funded places or abroad; School graduates' insufficient knowledge in mathematics and science subjects; Impossibility to financially ensure a qualitative study process due to the further decrease in the number of students; The impact of the COVID-19 pandemic. 			

Based on the SWOT analysis, the succession of RAI development and the state level planning documents referred to in Section 1, the goal of RAI Development plan 2021 and the tasks required to achieve it in the period of 2021 - 2027 have been determined.

<u>Goal:</u> To increase the quality of education without reducing the quality by implementing remote studies in the conditions of Covid-19 pandemic containment.

To achieve the goal, the following main tasks are set:

- 1) Modernization of study courses in accordance with the recommendations of the accreditation experts;
 - 2) Compliance of the professional qualifications awarded by RAI with the professional

standard and ESG standards and guidelines;

- 3) Promotion of internationalization:
 - attraction of foreign students,
 - strengthening cooperation with foreign universities (conferences, projects, student exchange, etc.),
 - strengthening cooperation with foreign partners in the field of scientific research,
 - stepping up cooperation with the European Union Aviation Safety Agency (EASA),
 - participation in the Erasmus program;
- 4) strengthening of scientific research work:
- participation in international contests and research grant acquisition processes,
- implementation of business commercial projects,
- participation in scientific conferences and other events,
- more active involvement of students in research work:
- 5) Development of cooperation with employers:
- implementation of internship,
- improvement of study programs and study courses, participation in the coordination of the development of bachelor's and master's theses;
- 6) teaching staff renewal policy:
- hire the staff with a good knowledge of a foreign language, especially English,
- attract more teachers currently working in the relevant economic sector,
- periodically update English language courses for the teaching staff and the administrative staff;
- 7) Improving the students' knowledge in mathematics and physics at the secondary education level during the 1st academic year;
- 8) Supplementing and updating the library holdings with the latest editions, especially in the English language.

4. Key indicators to be achieved as a result of the implementation of the development plan

Indicators		2023	2027
Number of modernized study courses		10	20
Percentage of foreign students to total number of students, %		32	35
Percentage of teaching staff working in the relevant field, %	20	25	30
Indicator of the annual scientific activity (publications, participation in conferences, projects) per one representative of the academic staff		0,8	1,0
The audits conducted by the European Aviation Safety Agency with positive result	+	+	+