RIGA TECHNICAL UNIVERSITY

National classifications of programmes in higher education

Uldis Sukovskis
Vice-rector for Academic Affairs, Riga Technical University
14/02/2019

Agenda

- Riga Technical University in brief
- National Qualification Framework
- Education system in Latvia
- Study directions (Study fields)
- State standards in higher education
- Study programmes in RTU - examples

RIGA TECHNICAL UNIVERSITY

FACTS & FIGURES

~15.000 STUDENTS

12% FOREIGN STUDENTS

CAMPUS IN ĶĪPSALA

12 STUDY DIRECTIONS (FIELDS)

138 STUDY PROGRAMMES

9 FACULTIES (SCHOOLS)

4 AFFILIATIONS: CESIS, LIEPAJA, VENTSPILS, DAUGAVPILS

RTU ENGINEERING HIGH SCHOOL

1862
RIGA TECHNICAL UNIVERSITY

RTU FACULTIES (schools)

- COMPUTER SCIENCE AND INFORMATION TECHNOLOGY
- ELECTRONICS AND TELECOMMUNICATIONS
- POWER AND ELECTRICAL ENGINEERING
- MATERIAL SCIENCE AND APPLIED CHEMISTRY
- MECHANICAL ENGINEERING, TRANSPORT AND AERONAUTICS
- CIVIL ENGINEERING
- ARCHITECTURE
- ENGINEERING ECONOMICS AND MANAGEMENT
- E-LEARNING TECHNOLOGIES AND HUMANITIES

National Qualification Framework

LQF/EQF level	*Qualifications*
8	**Doctor's diploma**
7	**Master's diploma** **Professional Master's diploma** **Diploma of professional higher education, diploma of higher education, diploma of higher professional qualification (duration at least 5 years)**
6	**Bachelor's diploma** **Professional Bachelor's diploma** **Diploma of professional higher education, diploma of higher professional qualification (duration at least 4 years)**
5	**Diploma of first level professional higher education (college education, duration 2-3 years)**
4	Certificate of general secondary education Diploma of vocational secondary education Certificate of professional qualification (for adults)
3	Certificate of vocational education Certificate of professional qualification (for adults)
2	Certificate of general basic education Certificate of vocational basic education Certificate of professional qualification (for adults)
1	Certificate of general basic education (for students in special education programmes)

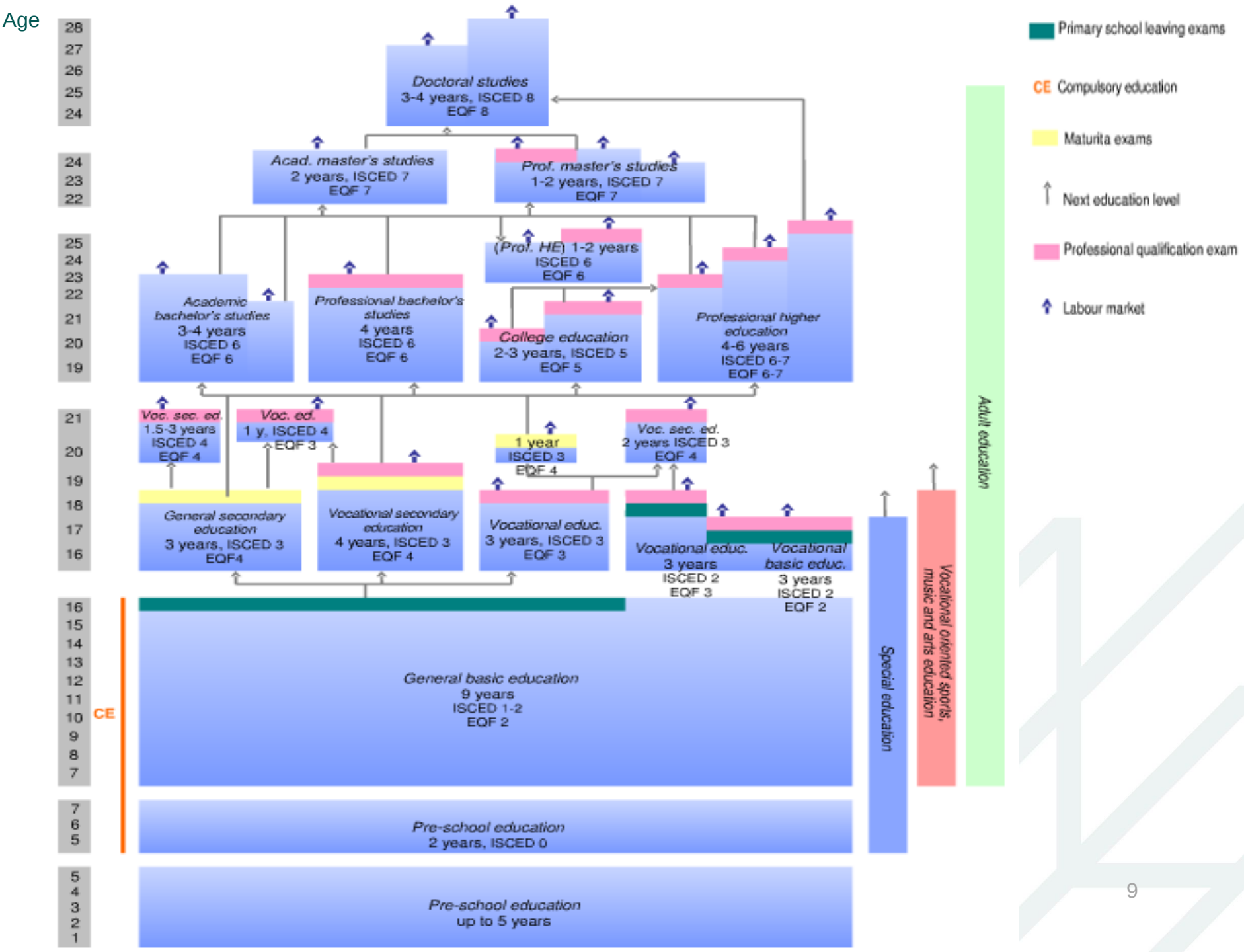
Higher education

LQF/EQF Level Descriptors

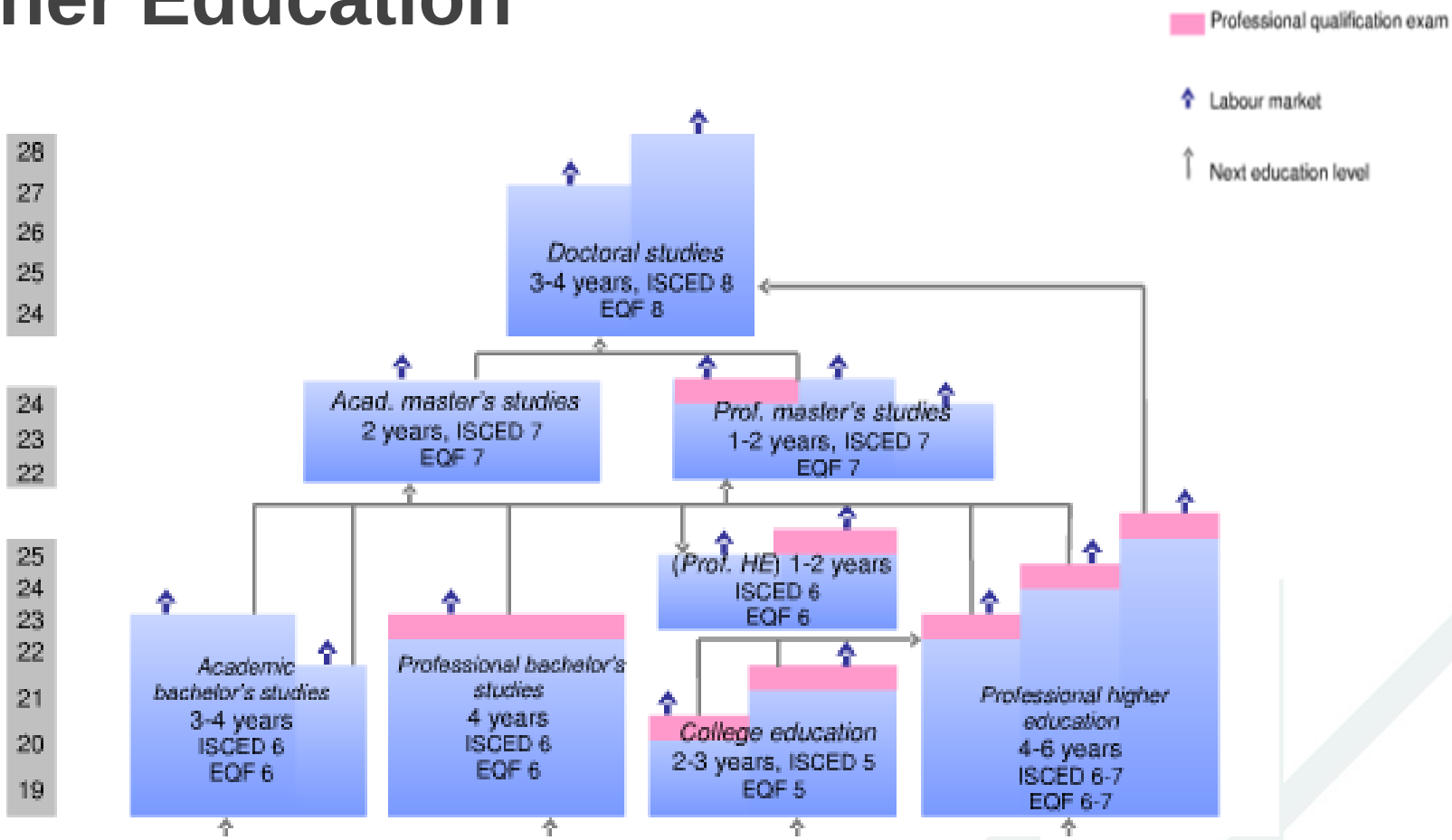
Example for the LQF level 7

Knowledge	*Skills*	*Competence*
Able to demonstrate **advanced or extensive knowledge and understanding**, a part of which conforms with the **most recent findings** in the concrete branch of science or professional field and which provide the **basis for creative thinking or research**, inter alia, working in the interface of various fields.	Able to **use independently theory, methods and problem solving skills to perform research or artistic activities**, or highly qualified professional functions. Able to provide arguments when explaining or **discussing complex or systemic aspects of the concrete branch of science or professional field** both to specialists and non-specialists. Able to guide independently the improvement of one's own competences and specialisation, **to assume responsibility for the results of staff and group work and analyse them**, to perform business activities, innovations in the concrete branch of science or profession, to perform work, research or further learning under complex or unpredictable conditions, if necessary, change them, using new approaches.	Able **to define independently and critically analyse complex scientific and professional problems, substantiate decisions** and, if necessary, carry out additional analysis. **Able to integrate knowledge of various fields, contribute to the creation of new knowledge, research or the development of new professional working methods**, demonstrate understanding and ethical responsibility for the possible impact of the scientific results or professional activity on environment and society.

Education System in Latvia


Age
28
27
26
25
24
Doctoral studies
3-4 years, ISCED 8
EQF 8
24
23
22
Acad. master's studies
2 years, ISCED 7
EQF 7
Prof. master's studies
1-2 years, ISCED 7
EQF 7
25
24
23
22
21
20
19
(Prof. HE) 1-2 years
ISCED 6
EQF 6
Academic bachelor's studies
3-4 years
ISCED 6
EQF 6
Professional bachelor's studies
4 years
ISCED 6
EQF 6
College education
2-3 years, ISCED 5
EQF 5
Professional higher education
4-6 years
ISCED 6-7
EQF 6-7
21
20
19
18
17
16
Voc. sec. ed.
1.5-3 years
ISCED 4
EQF 4
Voc. ed.
1 y, ISCED 4
EQF 3
1 year
ISCED 3
EQF 4
Voc. sec. ed.
2 years ISCED 3
EQF 4
General secondary education
3 years, ISCED 3
EQF4
Vocational secondary education
4 years, ISCED 3
EQF 4
Vocational educ.
3 years, ISCED 3
EQF 3
Vocational educ.
3 years
ISCED 2
EQF 3
Vocational basic educ.
3 years
ISCED 2
EQF 2
16
15
14
13
12
11
10
9
8
7
CE
General basic education
9 years
ISCED 1-2
EQF 2
7
6
5
Pre-school education
2 years, ISCED 0
5
4
3
2
1
Pre-school education
up to 5 years
Special education
Vocational oriented sports, music and arts education
Adult education
Primary school leaving exams
CE Compulsory education
Maturita exams
Next education level
Professional qualification exam
Labour market

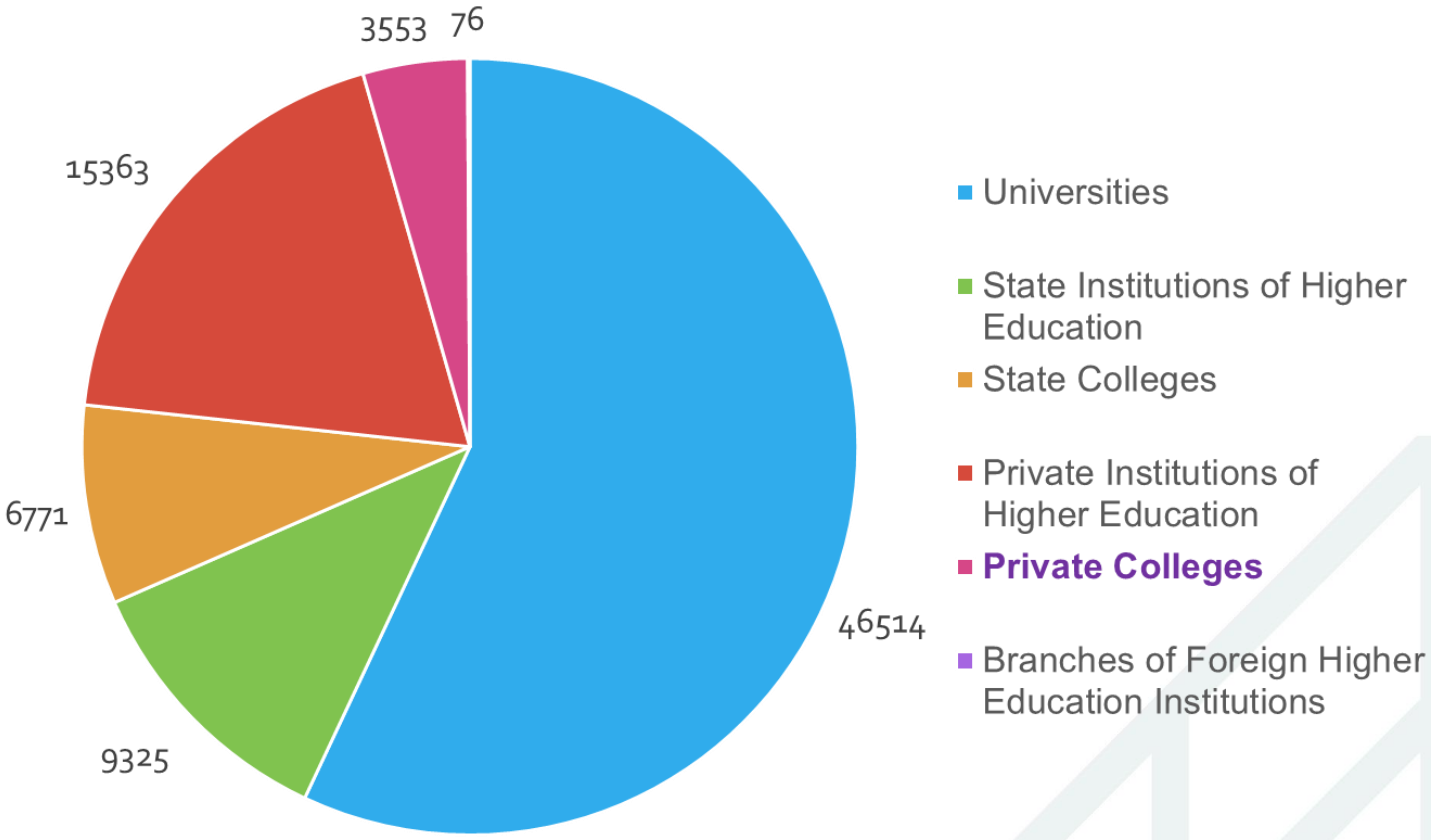
Higher Education



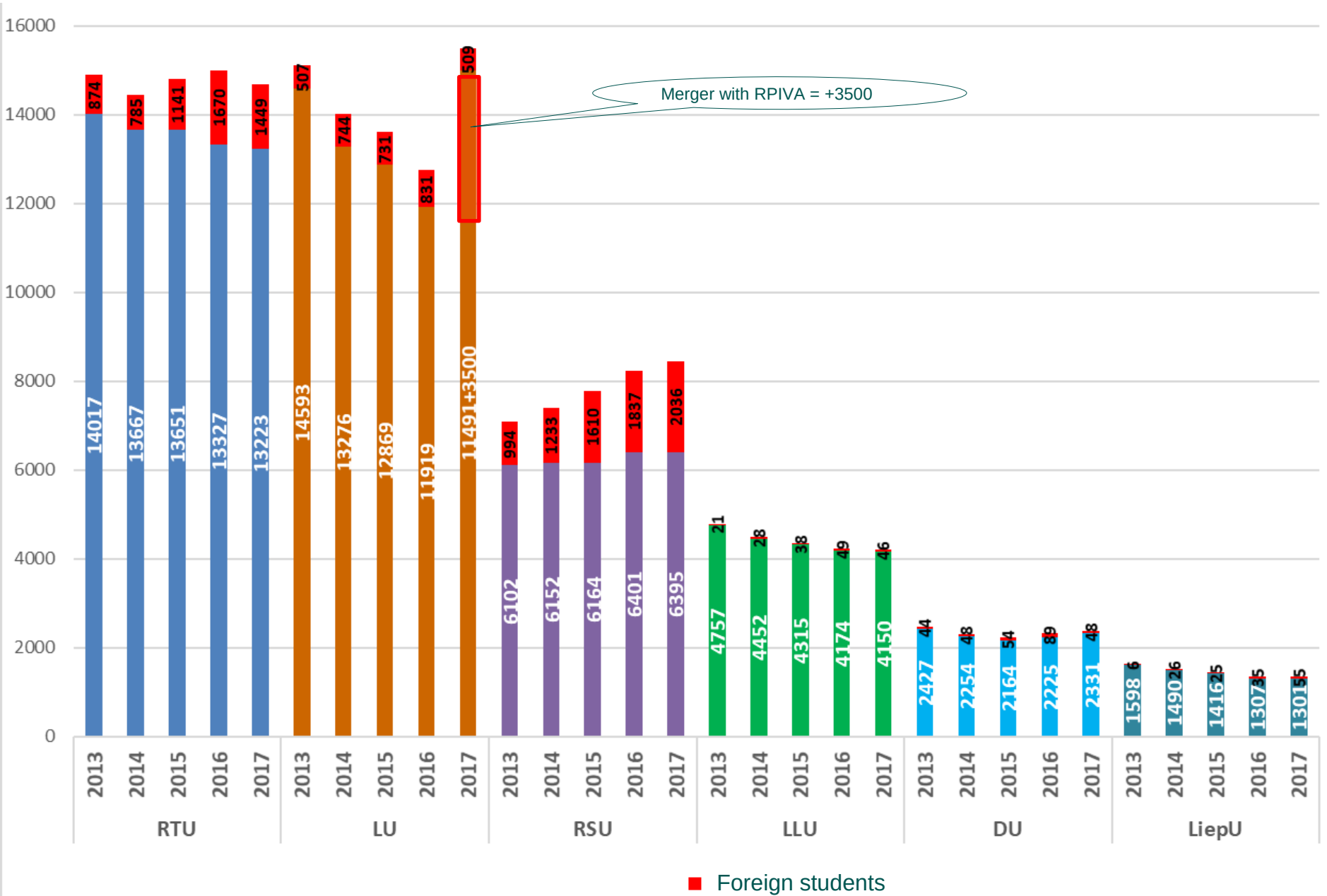
Higher education institutions

- A college *(koledža)* is an educational institution that provides programmes of the first level of professional higher education (LQF/EQF level 5)
- Institution of higher education (*augstskola*) - at least 40% of academic staff in elected positions must hold a PhD degree
- Academy (*akadēmija*) – at least 50% of academic staff in elected positions must hold a PhD degree, unless otherwise determined by the Cabinet of Ministers (e.g. arts, maritime affairs, national defence)
- University (*universitāte*) - at least 65% of academic staff in elected positions must hold a PhD degree, publish scientific periodicals covering areas of teaching and research, have divisions or research institutes performing scientific research

Number of students 2017/2018



Number of students in universities



Study programmes (1/3)

- The system of higher education comprises **academic higher education** programmes and **professional higher education programmes**
- Requirements for structure, credits, degrees awarded, etc. are defined by two separate regulations of the Cabinet of Ministers
- Graduates from professional study programmes besides the degree (bachelor or master) are awarded professional qualification which corresponds to professional standard

- ***Academic bachelor study programme*** - 120-160 Latvian credits (180-240 ECTS)
- ***Academic master study programme*** - 80 Latvian credits (120 ECTS)
- ***Professional bachelor study programme*** - at least 160 Latvian credits (240 ECTS)
- ***Professional master study programme*** - at least 40 Latvian credits (60 ECTS)

Study programmes (2/3)

- ***First level professional higher education (college) study programme*** is 80-120 CP (120-180 ECTS), and it is basically intended for the acquisition of a profession, but the graduates may continue studies in second level professional higher education programmes

- ***Second level professional higher education programme*** at least 40 CP (60 ECTS) after the acquisition of a Bachelor's degree or at least 160 CP (240 ECTS) after the acquisition of secondary education

- If the programme comprises the mandatory part of a bachelor's programme, the graduates acquire the right to enrol in a master programme

Study programmes (3/3)

Doctoral studies

- The pre-condition for enrolment in a doctoral programme is a master degree (academic or professional)
- Most programmes have a duration of 3 to 4 years
- The doctoral degree is awarded to a person, who has successfully passed the examinations in the chosen field of research and who has elaborated and publicly defended a doctoral thesis
- The Latvian Council of Science appoints a Promotion Council and sets the procedures for an award of Doctor's degrees

- Doctoral degrees are awarded in accordance with Regulations on the branches and sub-branches of science in Latvia (Cabinet Regulations No.49, 23.01.2018)

Classification codes

The study programmes implemented in an institution of higher education are divided into the following thematic groups according to Regulations on the Classification of Education in Latvia (Cabinet Regulations No.322, 13.06.2017):

1) education;
2) humanities and arts;
3) social science, commercial science and law;
4) engineering sciences, production and construction work;
5) natural sciences, mathematics and information technology;
6) agriculture;
7) health care and social welfare;
8) services.

Five digit code assigned to study programme contains information about level, type, thematic group and thematic area of the programme.

Study directions (fields)

Study directions - for accreditation

- Law on Institutions of Higher Education:

  Accreditation of the study direction - an inspection with the purpose of determining the quality of the resources of an institution of higher education or college and the ability to implement a study programme corresponding to a specific study direction in accordance with regulatory enactments. The accreditation of the study direction of an institution of higher education or college gives the institution of higher education or college the right to issue a State-recognised diploma of higher education for successful acquisition of a study programme corresponding to the relevant study direction.

- “Rules for opening and accreditation of study directions” (Cabinet Regulations No. 793, 11.12.2018)

Study directions (1/2)

1. Education, pedagogy and sports
2. Arts
3. Religion and theology
4. History and philosophy
5. Language and cultural studies, native language studies and language programmes
6. Translation
7. Psychology
8. Sociology, politics and anthropology
9. Economics
10. Information and communication sciences
11. Management, administration and real estate management
12. Law science
13. Natural sciences
14. Geography and earth sciences
15. Chemistry, chemical technologies and biotechnology
16. Physics, material science, mathematics and statistics

Study directions (2/2)

17. Information technology, computer engineering, electronics, telecommunications, computer management and computer science
18. Mechanics and metal working, heat power industry, heat engineering and mechanical engineering
19. Power industry, electrical engineering and electrical technologies
20. Production and processing
21. Architecture and construction
22. Agriculture, forest management, fishing, veterinary medicine and food hygiene
23. Health care
24. Social welfare
25. Hotel and restaurant service, tourism and recreation organisation
26. Transport services
27. Environmental protection
28. Internal security and civil defence
29. Military defence

State standards in higher education

State standarts (1/2)

- “Regulations on the State Standard of the Academic Education” (Cabinet Regulations No.240, 13.05.2014)
  - Academic bachelor study programmes
  - Academic master study programmes

- “Regulations regarding the state standard in the second-level professional higher education” (Cabinet Regulations No.512, 26.08.2014)
  - Professional bachelor study programmes
  - Professional master study programmes
  - Second level professional higher education programmes

- “Regulations regarding the State Standard for First Level Professional Higher Education” (Cabinet Regulations No.141, 20.01.2001)
  - First level professional higher education (college) study programme

State standarts (2/2)

- For doctoral programmes procedures for the conferral of a doctoral degree in science are regulated by
  - Law On Scientific Activity
  - ”Regulations on Delegation of Doctoral Degree (Promotion) Rights to Higher Education Institutions” (Cabinet Regulations No.1000, 27.09.2005)

Professional standards in higher education

- The content of professional study programmes corresponds to professional standarts and graduates are awarded the professional qualification

- Professional standards are structured in **five levels** of professional qualifications (for higher education - 4th and 5th level of professional qualification)
- Professional standards describe the **theoretical and practical background** of the qualification ensuring the ability to undertake work corresponding to a specific level of complexity and responsibility

RTU study programmes - examples

Study directions in RTU

RĪGAS TEHNISKĀ UNIVERSITĀTE

No.	Study direction	Number of programmes
1	Architecture and construction	19
2	Economics	3
3	Power industry, electrical engineering and electrical technologies	12
4	Physics, material science, mathematics and statistics	6
5	Internal security and civil defence	6
6	Information technology, computer engineering, electronics, telecommunications, computer management and computer science	30
7	Chemistry, chemical technologies and biotechnology	7
8	Mechanics and metal working, heat power industry, heat engineering and mechanical engineering	23
9	Production and processing	5
10	Translation	2
11	Environmental protection	3
12	Management, administration and real estate management	22
	Total	138

Study directions in RTU

Example 1

- Study direction «Economics» with 3 programmes
  - Economics – academic bachelor
  - Economics – academic master
  - Urban and Regional Engineering Economics – professional master

Example 2

- Study direction «Information technology, computer engineering, electronics, telecommunications, computer management and computer science» with 30 programmes in three faculties of RTU
- Includes for example 6 programmes on different levels:
  - Computer Systems – college
  - Computer Systems – academic bachelor
  - Computer Systems – professional bachelor
  - Computer Systems – academic master
  - Computer Systems – professional master
  - Computer Systems – doctoral

Study programmes in RTU

Level	Number of programmes
College	10
Academic bachelor	17
Professional bachelor	31
Academic master	26
Professional master	31
Doctoral	20
Second level professional	3

Study programmes in RTU

Joint study programmes

Example 1

- RTU and Riga Stradiņš University
- 42526 Medical Engineering and Medical Physics - professional bachelor study programme
  - Riga Technical University – in the study direction «Mechanics and metal working, heat power industry, heat engineering and mechanical engineering»
  - Riga Stradiņš University – in the study direction «Health care»

Example 2

- RTU and Latvian Academy of Culture
- 43217 Creative Industries - academic bachelor study programme
  - Riga Technical University – in the study direction «Management, administration and real estate management»
  - Latvian Academy of Culture – in the study direction «Arts»

THANK YOU
FOR YOUR ATTENTION!