APPROVED

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# THE UNIVERSITY OF ECONOMICS AND CULTURE DEVELOPMENT STRATEGY FOR SCIENCE AND CREATIVE ACTIVITY

2016-2020

Development Strategy for Science and Creative Activity 2016-2020 (ZRDAS2020) of the University of Economics and Culture/J. Titko - Riga, 2016.

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#### INTRODUCTION

- [1] The national strategic document *The national concept of the development of higher education and the institutions of higher education 2013-2020* emphasises the need for "strengthening the link among education, research and innovation policy, through supporting its innovative interaction with all the areas of life of the society, including also innovative business, facilitating research excellence, transfer of knowledge and ensuring innovation process in the national economy. It urges the necessity to review the existing perception of the interrelation between higher education and research, acknowledging that all levels of higher education are directly research-based, by modifying relationship models between studies and research: including various emphasis on the content, process and problems of research".
- [2] Higher education institutions have the duty to perform scientific activity (Law On Scientific Activity) and provide for the study process, where the student scientific and research activity and/or artistic creativity is an integral part.
- [3] The Development Strategy for Science and Creative Activity 2016-2020 (in Latvian Zinātnes un radošās darbības attīstības stratēģija 2016.-2020. gadam, acronym ZRDAS2020) is a university-level medium term planning document, which has been developed within the framework of a higher level planning document Development Strategy of the University of Economics and Culture (in Latvian Ekonomikas un kultūras augstskolas attīstības stratēģija, acronym EKAAS) ".
- [4] ZRDAS2020 has been developed in line with the aims and objectives of national development planning documents priority "Advanced Research and Innovation and Higher Education" included in the *Latvian national development plan for the 2014-2020* (NAP2020), *Guidelines for the development of education 2014-2020* and *Guidelines for science, technology development and innovations 2014-2020*.
- [5] The structure of NAP2020 has been taken as a framework for developing the structure of ZRDAS2020.
- [6] In view of the ZRDAS2020 priority areas and defined aims, each year a ZRDAS2020 Action plan is developed and implemented at the University of Economics and Culture.
- [7] The Vice Rector for Science of the University of Economics and Culture is responsible for the development of ZRDAS2020 and strategic Action plan, as well as for the achievement of the set objectives.

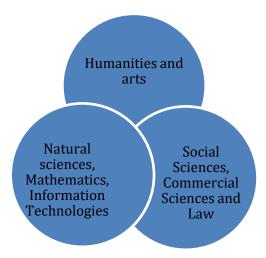
#### VISION OF THE UNIVERSITY OF ECONOMICS AND CULTURE IN 2020

The vision has been defined in the UEC development strategy (in Latvian - EKA attīstības stratēģija, acronym - EKAAS) 2018-2020:

"The UEC is developing as an inter-branch multicultural university. It prepares knowledgeable, creative and independent personalities who are excellent professionals in their areas. The UEC is associated with competitive education, internationally acknowledged diplomas, high professional quality of our graduates, well-developed scientific research base and highly qualified academic and administrative personnel."

The main objective of the UEC in the development of science and research is to enhance the competitiveness of the university by building a strong base of scientific infrastructure and human resources, strengthening the cooperation between the science and business sectors, developing the transfer of research results to business, thus contributing to the achievement of the Latvian national strategic development goals.

The UEC provides study programmes of various thematic groups, which, in their turn, facilitate interdisciplinary approach to research and creative activity.



#### Scientific vision of the UEC:

In 2020, The University of Economics and Culture is a science-based and innovationoriented higher education institution recognized in Latvia and Europe:

- where highly motivated and qualified employees (mainly holding a doctoral degree) are attracted to perform scientific and academic activities,
- where interdisciplinary research areas have been developed,
- where students are actively involved in research and creative activities,
- where international scientific and creative activities take place on regular basis,

 which actively cooperates with other universities, institutions and employers in Latvia and abroad in order to strengthen its research capacity.

#### PRIORITIES OF THE UNIVERSITY OF ECONOMICS AND CULTURE

In order to ensure the development of the UEC in the field of research and creative activities within the planning period, the following priorities have been set:

#### The UEC staff (Pr1)

#### Why "The UEC staff"?

Higher education institutions have the duty to perform scientific activity (Law On Scientific Activity, section 19). In order to perform scientific activity, a higher education institution needs academic staff with scientific qualifications.

**Objective of the priority:** To increase the number of the university's staff involved in science

#### Priority's activity strands (Pr1\_AS)

Activity strand "Increasing the number of academic staff involved in science" (Pr1\_AS1)

Activity strand "Enhancing the scientific qualification of the UEC academic staff" (Pr1\_AS2)

#### Scientific reputation of the UEC (Pr2)

#### Why "Scientific reputation of the UEC"?

The scientific reputation is a prerequisite for the improvement of the overall image of the university in the academic environment, which, in its turn, promotes the visibility of the university among students, facilitates cooperation with other universities and institutions, provides for the loyalty of academic staff.

**Objective of the priority:** To ensure the recognition of the University of Economics and Culture in Latvia and Europe

#### Priority's activity strands (Pr2\_AS)

Activity strand "Promotion of scientific events organized but the UEC" (Pr2\_AS1)

Activity strand "Upgrading the UEC publishing activity" (Pr2\_AS2)

Research and creative activities of the UEC study directions (Pr3)

Why "Research and creative activities of the UEC study directions"?

One of the criteria for the evaluation of a higher education institution is "student scientific research activity and/or creative activity as a part of the study process" (Cabinet of Ministers Regulation No 407, Annex 3 "Assessment criteria of higher education institutions and colleges", Section 6, 6).

The University of Economics and Culture provides study programmes in six study directions:

- 1. Economics
- 2. Translation
- 3. Business management, administration and real estate management (hereinafter referred to as the "Management direction")
- 4. Information technology, hardware, electronics, telecommunications, computer, and computer science (hereinafter referred to as the "IT direction")
- 5. Law (hereinafter referred to as the "Law direction")
- 6. Arts (hereinafter referred to as the "Arts direction")

**Objective of the priority:** To increase research capacity in each study direction of the University of Economics and Culture; to ensure the involvement of the academic staff and students of each study programme in research and creative activity.

#### Priority's activity strands (Pr3\_AS)

Activity strand "Research development in each study direction" (Pr3\_AS1)

Activity strand "Involvement of the UEC academic staff in research and creative activity" (Pr3\_AS2)

Activity strand "Involvement of the UEC students in research and creative activity" (Pr3\_AS3)

#### **Infrastructure (Pr4)**

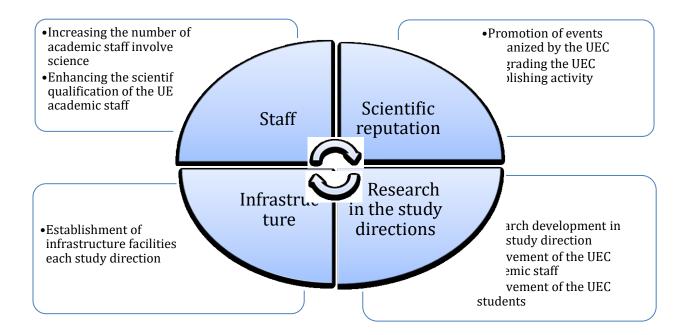
#### Why "Infrastructure"?

Research infrastructures are essential for enhancing research and innovation capacity and ensuring competitiveness.

**Objective of the priority:** Develop research infrastructure and material and technical provision of The University of Economics and Culture.

#### Priority's activity strands (Pr4\_AS)

Activity strand "Development of research infrastructure and material and technical provision of each study study direction direction" (Pr4\_AS1)



**Table 1.** The relation between the UEC's priority activity strands and the objectives defined in NDP2020 and Guidelines for the Development of Science, Technology and Innovation

Activity strand (AS)	NAP2020, SO "Advanced research, innovation and higher education"; SO "Development of competencies"	Guidelines for the Development of Science, Technology and Innovation 2014-2020
Pr1_AS1 Increasing the number of academic staff involved in science	[170] Attraction of human resources	AS1 STI human capital development
PR1 AS2 Enhancing the scientific qualification of the UEC academic staff	[190] Encouraging a higher rate of scientific publication by university staff	Increase of the number of research papers published in internationally recognised databases. 37
Pr2_AS1 Promotion of events organized but the UEC	[291] Provision of science workshops, competitions and research projects for pupils	AS 4 Promotion of scientific achievements
Pr2_AS2 Upgrading the UEC publishing activity	[190] Launching of international journals	
Pr3_AS1 Research development in each study direction		AS 3 Development of research in higher
Pr3_AS2 Involvement of the UEC academic staff in research and creative activity		education
Pr3_AS3 Involvement of the UEC students in research and creative activity		
Pr4_AS1 Establishment of infrastructure facilities for each study direction	[186] Development of the innovation support infrastructure	
	[190] development of material and technological provision (equipment)	

#### PRIORITY "THE UEC STAFF"

#### Activity strand "Increasing the number of academic staff involved in science"

"In institutions of higher education, at least forty per cent of persons elected to academic positions shall have doctoral degrees. ..." (Law On Institutions of Higher Education, Section 3).

When founding an institution of higher education "the institution of higher education shall implement at least five study programmes and in the implementation thereof at least 30 persons with a doctoral degree shall be involved, of whom at least five are doctors in the branch of science in which the study programme is implemented" (Law On Institutions of Higher Education, Section 8 (6.1))

"Not less than five professors and associate professors altogether, who are elected to academic positions in the relevant institution of higher education, shall take part in the implementation of the compulsory part and the limited elective part of academic study programmes..." (Law On Institutions of Higher Education, Section 55 (3))

#### Activity strand's objectives:

**Pr1\_AS1 Objective 1.** Increase of the number academic staff with a doctoral degree elected to academic positions (providing 60% of the total number of academic staff)

**Pr1\_AS1 Objective 2.** Increase of the number academic staff elected to the positions a professor and associate professor

#### Action strand's objectives: achievement indicators:

**Indicator 1.** The number of academic staff members with a doctoral degree elected to academic positions at the University of Economics and Culture University.

**Indicator 2.** The number of academic staff members elected to the positions of a professor and/ or associate professor

Table 2. Projected indicators for achieving the objectives of PR1 AS1

	Indicator	Base value (01.01.2016.)	2018 2019		2020
1.	Number of the UEC academic staff with a doctoral degree (total), incl.	14 (22)	31 (52)	35 (58)	41 (68)
1.1.	Number of academic staff with a doctoral degree in Economics/Management (in the study directions of Economics and Management)	9 11		13	15
1.2.	Number of academic staff with a doctoral degree in Computer science/Information Technologies/Mathematics (in the study direction Information Technologies)	0	0 4		6
1.3.	Number of academic staff with a doctoral degree in Law	0	4	5	6
1.4.	Number of academic staff with a doctoral degree in Linguistics	1	4	5	6
1.5.	Number of academic staff with a doctoral degree in Arts	1	1	2	3
1.6.	Number of academic staff with a doctoral degree in other scientific areas	3	5	5	5
2.	Number of persons elected to the UEC positions of a professor and/ or associate professor, incl.	6	10	14	18

2.1.	In the study direction Economic and Management	6	8	9	10
2.2.	In the study direction Information Technologies	-	-	1	2
2.3.	In the study direction Law	-	1	2	3
2.4.	In the study direction Translation	-	1	2	3

<sup>\*</sup>The UEC academic staff are the academic staff members elected to the UEC academic positions (hereinafter the UEC academic staff).

#### Activity strand "Enhancing the scientific qualification of the UEC academic staff"

#### Activity strand's objectives:

**Pr1\_AS2 Objective 1.** Increasing the number of the UEC staff – experts of the Latvian Council of Science

Pr1\_AS2 Objective 2. Promotion of the scientific reputation of the UEC staff

**Pr1\_AS2 Objective 3.** Upgrading the scientific qualification of the UEC staff

#### Action strand objectives: achievement indicators:

**Indicator 1.** Number of the UEC staff as approved experts of the Latvian Council of Science

Target: 40% of the UEC's staff with a doctoral degree are experts of the Latvian Council of Science

Indicator 2. Number of the UEC staff with an active ResearchGate account

Target: 40% of the UEC's staff with a doctoral degree have an active ResearchGate account

**Indicator 3.** Number of the UEC staff as participants of scientific methodological conference

Target: at least 3 of each study direction

**Indicator 4.** Number of UEC staff as participants of scientific – creative seminars

Target: at least 2 of each study direction

**Table 3** Projected indicators for achieving the objectives of PR1 AS2

	Indicator	Base value 2018 (01.01.2016.)		2019	2020
1.	Number of experts of the Latvian Council of Science	4	12	14	16
2.	Number of the UEC staff with an active ResearchGate account	n/a	12	14	16
3	Number of the UEC staff as participants of scientific methodological conference	n/a	20	30	40
4	Number of UEC staff as participants of scientific - creative seminars	n/a	12	12	12

#### PRIORITY "SCIENTIFIC REPUTATION OF THE UEC"

Activity strand "Promotion of scientific events organized but the UEC"

#### **Activity strand's objectives:**

**Pr2\_AS1 Objective 1.** Increase the number of participants of the scientific and creative events organized by the UEC.

#### Action strand's objectives: achievement indicators:

**Indicator 1.** The number of participants of the international scientific conference "Emerging trends in economics, culture and Humanities (etECH)" held by the UEC, including the number of representatives of foreign universities

Target: to ensure that 50% of the participants are from foreign universities; to ensure the participation of the UEC staff – at least 6 representatives from each study direction

**Indicator 2.** Number of participants in the pupil competitions organized by the UEC

Table 4 Projected indicators for achieving the objectives of PR2 AS1

	Indicator	Base value 2018 (01.01.2016.)		2019	2020
1.	The number of participants of the international scientific conference etECH held by the UEC, including the number of representatives of foreign universities	n/a	100 (50)	100 (60)	100 (60)
2.	Number of participants in the pupil competitions organized by the UEC, incl.	-	-	-	-
2.1.	The English Language Competition "English guru"	0	100	100	100
2.2.	The IT Competition "OPEN MIND"	n/a	20	20	20
2.3.	Financial Competition "Financial ABC"	0	100	100	100

#### Activity strand "Upgrading the UEC publishing activity"

Institutions of higher education have the duty to perform scientific activity and issue collections of scientific papers or magazine (Law On Scientific Activity, section 19 (1)).

#### Activity strand's objectives:

**Pr2\_AS2 Objective 1.** To ensure the preparation and issue of high quality scientific publications

#### Action strand's objectives: achievement indicators:

Indicator 1. Number of journals and scientific proceedings regularly issued by the UEC

Indicator 2. Number of scientific monographs, learning aids issued by the UEC

**Table 5** Projected indicators for achieving the objectives of PR2 AS2

	Indicator	Base value	2018	2019	2020
		(01.01.2016.)			
1.	Number of journals and scientific proceedings regularly issued by the UEC	2	3	3	3
2.	Number of scientific monographs, learning aids issued by the UEC	0	1	2	2

#### PRIORITY "RESEARCH AND CREATIVE ACTIVITIES OF THE STUDY DIRECTIONS"

#### Activity strand "Research development in each study direction"

Taking into account the study programmes provided by the University of Economics and Culture and in line with the priority directions in science for the time period from 2018 to 2021 (Ministry of Education and Science, 2017), the priority research areas of the University of Economics and Culture have been defined.

The UEC priority in science is interdisciplinary research. This means that several research projects can be carried out within one research direction involving the academic staff and students from different study directions.

Research directions are approved by the Study Board of the respective study direction. The list of research directions is approved by the Vice Rector for Science of the UEC.

A coordinator is appointed for each research direction, who leads the work of the research group and is responsible for research results in the direction.

The priority research areas for each academic year are defined in the Action plan of the Development Strategy for Science and Creative Activity 2016-2020 (in Latvian - Zinātnes un radošās darbības attīstības stratēģija 2016.-2020. gadam, acronym - ZRDAS2020).

#### Activity strand's objectives:

Pr3\_AS1 Objective 1. To encourage research and creative activity in each study direction

Pr3\_AS1 Objective 2. To upgrade the scientific quality of the study process

**Pr3\_AS1 Objective 3.** To promote the transfer of research and innovation to business

#### Action strand objectives: achievement indicators:

Indicator Number of research projects to be undertaken in each study direction

Target: At least one research project where the academic staff and students of the study direction are involved

Indicator 2 The number of final papers that have received high evaluation in the Review section "Scientific quality of the paper" ("GUIDELINES ON PREPARATION AND DEFENSE OF RESEARCH PAPERS, PROJECT REPORTS AND THESES AT THE UNIVERSITY OF ECONOMICS AND CULTURE")

Target: At least 50% of the total number of final papers have received high evaluation in the Review section "Scientific quality of the paper"

**Indicator 3:** Number of registered technology rights (rights to design templates, software copyright, patents)

Target: At least one registration per 3 years

**Indicator 4:** Number of commercialized products (services, prototypes, ideas) number or placed orders

Target: At least one commercial product or research performed following an order per 3 years

#### Activity strand "Involvement of the UEC academic staff in research and creative activity"

#### **Activity strand's objectives:**

**Pr3\_AS2 Objective 1.** Increasing the number of scientific publications of the UEC academic staff in internationally cited databases (priority: Thomson Reuters Web of Science (WoS) and SCOPUS)

**Pr3\_AS2 Objective 2.** Encouraging the participation of the UEC academic staff in scientific conferences and seminars

#### Action strand's objectives: achievement indicators:

**Indicator 1.** Number of scientific papers by the UEC academic staff published in scientific publications

Target: The UEC academic staff members with a doctoral degree – at least 1 scientific paper per year published in Thomson Reuters Web of Science or Scopus database. The UEC academic staff members without a doctoral degree – at least 1 scientific paper per year published in an internationally cited database

**Indicator 2.** Participation of the UEC academic staff in international scientific seminars and conferences

Target: The UEC academic staff members with a doctoral degree – participation in at least 1 international scientific conference per year

**Table 6.** Projected indicators for achieving the objectives of PR3 AS2

	Indicator	Base value (2015/ 2016)	2018	2019	2020
1.	Number of scientific papers by the UEC academic staff published in scientific publications (incl. in WoS or Scopus databases):	28 (6)	50 (30)	55 (35)	60 (40)
1.1.	In study direction Economic and Management (WOS or Scopus databases)	n/a	11	13	15
1.2.	In study direction Information Technologies (WOS and Scopus databases)	n/a	4	5	6
1.3.	In study direction Law (WoS or Scopus databases)	n/a	4	5	6
1.4.	In study direction Translation (WoS or Scopus databases)	n/a	4	5	6
1.5.	Other papers published in WoS or Scopus databases	n/a	7	7	7
2.	Participation of the UEC academic staff in international scientific seminars and conferences	n/a	30	35	40

Activity strand "Involvement of the UEC students in research and creative activity"

#### **Activity strand's objectives:**

**Pr3\_AS3 Objective 1.** Increasing the number of scientific publications by the UEC students

**Pr3\_AS3 Objective 2.** Encouraging the participation of the UEC students in scientific conferences and seminars

#### Action strand's objectives: achievement indicators:

**Indicator 1.** Number of published UEC students' scientific papers

Target: To ensure submission of scientific papers to the UEC/AK publication of Student papers (at least 2 papers from bachelor study programme students, and at least 1 paper from college programme students). For Master programme students paper submission is a mandatory requirement according to "Guidelines on Preparation and defense of research papers, project reports and theses at the University of Economics and Culture" (approved by the UEC Senate meeting as of 9.11.2016).

**Indicator 2.** Participation of the UEC students in international scientific seminars and conferences

Target: To ensure the participation of the UEC students in the UEC/UK Student International Scientific Practical Conference with a submitted abstract and/or presentation in Conference section:

In Master study programmes – abstracts from all  $2^{nd}$  year students and at least 3 presentations

In Bachelor study programmes – at least 3 abstracts and at least 2 presentations

In College study programmes – at least 2 abstracts and at least 1 presentation

**Indicator 3.** Number of the UEC student research papers in the priority research directions

Target: not defined

**Indicator 4.** Number of the UEC student final papers in the priority research directions

Target: not defined

#### PRIORITY "INFRASTRUCTURE"

Activity strand "Development of research infrastructure and material and technical provision of each study direction"

#### **Activity strand's objectives:**

**Pr4\_AS1 Objective 1.** Establishing infrastructure facilities meeting the needs of scientific and creativity development and provision of modern material and technical provision in each study direction

#### Action strand's objectives: achievement indicators:

**Indicator 1.** Infrastructure facilities and material - technical provision in the study direction

Target: To provide an infrastructure facility (specialized room) for each study direction and improve the material - technical provision for performing research or creative activities

## THE IMPLEMENTATION, MONITORING AND EVALUATION PROCESS OF THE DEVELOPMENT STRATEGY FOR SCIENCE AND CREATIVE ACTIVITY

At the beginning of each academic year, the UEC Vice Rector for Science assesses the progress of the ZRDAS2020 and develops ZRDAS2020 Action Plan for the respective year, identifying the priority development tasks, deadlines and responsible in charge. After its approval, the UEC Board controls the implementation of Action Plan.

The Action Plan is devised in line with the BOARD system (see. Table 7):

- B budget the source of financing activities
- 0 organisation the person in charge for achieving the result
- A activities the activities to be carried out for achieving specific objectives
- R results performance indicator
- D deadline due date

**Table 7.** ZRDAS2020 Action plan table (example)

Activity strand	Objective	The UEC Performance indicator		Deadline	Person in charge	Budget
Pr3_AS2	To increase the number of scientific publications of the UEC academic staff in internationally cited databases	Number of scientific papers by the UEC academic staff published in scientific publications (incl. in WoS or Scopus databases):	50 (30)	31.08.yy.	Director of the Study Direction	Budget for science

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