

**APPROVED BY**  
**Chairman of the Management Board -**  
**Rector of NAO "Karaganda University**  
**named after academician E.A.Buketov"**  
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« » 2022

**Guidelines for the design and formatting of the educational program**  
**(as amended on November 30, 2022, Academic Council protocol No. 7)**

**1. General provisions**

1.1. These guidelines regulate the procedure for developing and formatting an educational program at all levels, taking into account the requirements of external documents, the possibilities of academic freedom, and the Republican Register of educational programs.

1.2. The educational program (EP) is developed in accordance with the requirements of the State Educational Standard of higher and postgraduate education, the National Qualifications Framework (NQF), the Industry Qualifications Framework (IQF), professional standards (PS), and based on the Dublin Descriptors.

1.3. The educational program is a document that regulates the goals, results, content, methods, and criteria for evaluating them.

1.4. The educational program promotes the formation of personal and professional competencies in students, necessary for building a successful career and implementing the principle of lifelong learning.

1.5. The educational program is designed based on a modular system of studying disciplines. A module is an autonomous, complete structural element of the EP from the point of view of learning outcomes, which has clearly formulated measurable learning outcomes acquired by students.

1.6. The educational program is developed in the context of a competency model for training specialists and reflects the acquired competencies, expressed in achieved learning outcomes. Competencies are the ability of students to practically apply the knowledge, skills, and abilities acquired during the learning process in professional activities.

1.7. When developing educational programs in English, a prerequisite is the availability of a diploma in the specialty "Foreign Language: Two Foreign Languages" or language certificates for teachers.

• English language: • Test of English as a Foreign Language Institutional Testing Program (TOEFL IBT), threshold score not less than 96-110, (B2) • International English Language Tests System (IELTS) threshold score not less than 5.5 (not lower than B2 level), issued by specialized language centers. (except for the Faculty of Foreign Languages) (added at the meeting of the Academic Council, protocol No. 7 of 30.11.2022).



## **2. Preparation for the development of an educational program**

1. A development group for the design of educational programs is created at the Academic Committee in accordance with paragraph 5.2. "Regulations on the Academic Council of Karaganda University named after E.A. Buketov";

2. The graduating department provides the Department of Academic Affairs with a justification for opening a new educational program based on an analysis of the following parameters according to Appendix 1:

a) determining the current and future needs of the labor market and the prospects for employment of graduates in accordance with the Atlas of New Professions (availability of applications from enterprises, institutions);

b) conducting an analysis of the competitive environment of educational services in the region, in nearby regions, opportunities and risks in the implementation of this program, the strengths and weaknesses of competitors;

c) conducting an analysis of the university's capabilities for implementing the EP, including the availability of necessary human resources, material, technical, information, and financial resources.

The EP justification indicates the subject area of training, the level of the program, and its purpose. The description should present its distinctive features.

3. The Department of Academic Affairs makes a decision on the feasibility of opening an EP in agreement with the Academic Council.

### **3. Stages of designing an educational program**

The design of the EP should be carried out in several stages and оформляться in accordance with the logic of Appendix 2.

**Stage 1.** Development of a graduate model of the EP according to Form 8 of Appendix 2.

Within the framework of this stage, the development group analyzes national qualifications frameworks, industry qualifications frameworks, professional standards, qualification requirements for positions, EPs of leading foreign universities, SES, qualification requirements for positions, etc. Simultaneously, the development group organizes a questionnaire survey of the employer to determine the key competencies of the EP graduate. Based on this, the Graduate Model is developed in form.

Three types of graduate competencies are distinguished:

1. Behavioral skills and personal qualities (Soft skills) include knowledge of languages, technological literacy, creativity, entrepreneurship, social intelligence, cooperation with team members, customer focus, ability to work with consumer requests, ability to make quick decisions, respond to changes in working conditions, ability to allocate resources and manage their time, etc.

2. Digital competencies (Digital skills) include a set of competencies for working in a digital environment and with digital products, including activities for creating and collecting data, processing and analyzing them, as well as using information technologies in professional activities. Digital competencies are not mandatory for doctoral programs, so they are determined at the discretion of the developers.



3. Professional competencies (Hardskills) allow a specialist to act competently in any conditions of professional activity.

**Stage 2.** Formulation of learning outcomes based on specific competencies according to Form 2 of Appendix 2.

At this stage, the development group should formulate learning outcomes based on the competencies described in the Graduate Model. Learning outcomes (hereinafter referred to as LO) should have the following characteristics:

a) LOs are formed for the entire educational program, their number should not exceed 15.

b) LOs should reflect the context, level, scope, and content of the educational program, be oriented towards the future needs of the labor market;

c) LOs should be interconnected;

d) The degree of complexity and content of LOs should correspond to the level of the educational program;

e) LOs should be achievable within the specified amount of labor costs;

f) LOs should detail the professional and personal context of the manifestation of competencies, describe labor functions through active verbs from Bloom's taxonomy (Appendix 3).

g) LOs begin with an active verb in the 3rd person singular and express what students will do in the course of professional activity;

h) LO formulations should be brief.

i) Each LO should be understandable, measurable, and achievable.

**Stage 3.** Determining the modules of disciplines in accordance with the learning outcomes according to Form 3 of Appendix 2.

At this stage, the development group should determine the modules of disciplines due to the formulated learning outcomes. One result can be achieved through several disciplines included in one module. The name of the module should be generalizing, due to the content of the disciplines included in it. The name of the discipline should reflect the subject of study. Each discipline is accompanied by a volume of credits according to the ECTS version.

**Stage 4.** Compilation of the Learning Outcomes Achievement Matrix according to Form 4 of Appendix 2.

At this stage, the development group should describe the disciplines, assign them an academic status and correlate them with the learning outcomes.

The description of the discipline reflects the goal and content as indicators of achieving learning outcomes. When describing a discipline, it is necessary to use the mandatory syntactic construction of the type: "It is studied in order to form knowledge/ideas about or skills ...; if necessary, you can continue the description using phrases such as "The issues are considered ...."; "The course is intended for studying ..." etc. The description should not contain terms, excerpts from lectures, textbooks, etc. Duplication of disciplines is not allowed, as well as the presence of different disciplines with the same description. Taking into account the technical parameters of the republican Register, it is recommended not to use more than 40 words in the description.



The assignment of academic status to disciplines is carried out using the concepts used in the State Educational Standard of higher and postgraduate education of the Republic of Kazakhstan to denote cycles and components: general education, basic, core disciplines; university component and component of choice.

As a result, the matrix should reflect the cycles and components in their relationship with the learning outcomes. The list should contain at least one basic and core interdisciplinary and multidisciplinary discipline.

The formation of cycles and components, the determination of the labor intensity of disciplines should be carried out in accordance with the requirements of the State Educational Standard of higher and postgraduate education of the Republic of Kazakhstan (Appendix 4).

For the bachelor's degree program, a Minor module is created according to Form 5 of Appendix 2. It should be aimed at forming additional competencies in students. The disciplines of the module should be included in the individual learning path on a par with the main program. This module is studied within the framework of the university component and the component of choice, is included in the total volume of academic credits. Its labor intensity should be 20-25 credits.

**Stage 5.**Coordination of learning outcomes with teaching and assessment methods according to Form 6 of Appendix 2.

At this stage, the development group should determine the methods 1 2 of teaching and assessing students in the context of learning outcomes. The nature of the selected methods should be determined by the level of the educational program.

**Stage 6.**Determining the criteria for evaluating the achievement of learning outcomes according to Form 7 of Appendix 2.

At this stage, the development group should provide each learning outcome with a criterion for its achievement. This ensures the measurability of the stated results.

The evaluation criterion should describe a completed action and be formulated in the categories "knows", "can", "masters", into which the following meaning is embedded:

a) knows - means that the student reproduces and explains the educational material with the required degree of scientific accuracy and completeness;

b) is able - means that the student solves typical educational problems by reproducing standard algorithms;

c) masters - means that the student solves complex educational problems based on acquired knowledge and skills.

The criterion can be expressed in three categories at once, or in two, or in one of them. That is, in some cases, the learning outcome will be measured through Knowledge + Ability + Mastery; in some only through Knowledge + Ability; Knowledge + Mastery; Ability + Mastery; in some only through Knowledge or Ability, or Mastery.



**Stage 7. Compilation of the Educational Program Passport according to Form 1 of Appendix 2.**

At this stage, the development group compiles the Educational Program Passport for 16 parameters. Each of them must be described in accordance with the requirements of the Republican Register of Educational Programs.

**Parameter 1. Code and name of the educational program.**

The educational program is encrypted in accordance with the Classifier of training areas for higher and postgraduate education. The name of the educational program should reflect its content, be brief, specific, attractive, and informative.

**Parameter 2. Code and classification of the field of education, the direction of training.**

It must comply with the Classifier of training areas for higher and postgraduate education dated October 13, 2018 No. 569.

**Parameter 3. Group of educational programs.**

This is a set of educational programs united by the commonality of the profile of the training direction and providing training within a specific field of education. The EP group must comply with the List of EP groups approved by the order of the Ministry of Education and Science of the Republic of Kazakhstan dated June 3, 2021 No. 264.

**Parameter 4. Number of credits.**

The total laboriousness for the entire period of study is indicated:

- in bachelor's degree programs, at least 240 academic credits;
- in master's degree programs, 120 academic credits (2 years); 60 academic credits (1 year);
- in doctoral programs, 180 academic credits.

**Parameter 5. Form of study.**

The full-time form of study is indicated.

**Parameter 6. Language of instruction.**

One or more languages of instruction are indicated, which include Kazakh, Russian, and foreign languages.

**Parameter 7. Awarded degree.**

The name of the degree must correspond to the fields and levels of education in accordance with Appendix 4 of the State Educational Standard No. 604 dated October 31, 2018 (as amended on May 5, 2020, No. 182).

**Parameter 8. Type of educational program.**

It is necessary to indicate the type of educational program in accordance with the Appendix to the order of the Ministry of Education and Science of the Republic of Kazakhstan dated December 23, 2020 No. 536 "Algorithm for including and excluding educational programs in the Register of educational programs of higher and postgraduate education" (No. 665 dated December 4, 2020).

The following types of EP are distinguished:

- a) current EP is an educational program under which training is carried out at the university; b) new EP is an educational program under which, before its introduction into the Register, personnel training was not carried out at the



university; c) innovative EP is an educational program that has no analogues in the Republic of Kazakhstan and is being introduced for the first time.

**Parameter 9. Level according to ISCED.**

This is the International Standard Classification of Education, according to which the bachelor's degree refers to level 6, the master's degree to level 7, and the doctorate to level 8.

**Parameter 10. Level according to NQF.**

This is the National Qualifications Framework, according to which the bachelor's degree refers to level 6, the master's degree to level 7, and the doctorate to level 8.

**Parameter 11. Level according to IRF.**

This is the Industry Qualifications Framework - a structured description of qualification levels recognized in the industry. To determine the levels of the industry qualifications framework, it is necessary to study the IRF and professional standards, which are available on the website of the National Chamber of Entrepreneurs "Atameken".

**Parameter 12. Distinctive features of the EP.**

These include characteristics such as joint (JEP) and double-diploma (DDEP) educational programs. In addition, it is necessary to indicate the partner university here.

**Double-degree education** is the opportunity to study in two educational programs in order to obtain two equivalent diplomas or one main and a second additional one.

Double-degree programs are developed on the basis of an agreement between two partner universities.

At the same time, the obligatory conditions for the implementation of double-degree programs are:

- a) development and approval of agreed educational programs;
- b) students enrolled in double-degree education master part of the educational program in a partner organization of higher and (or) postgraduate education;
- c) mandatory recognition and automatic re-crediting of periods and learning outcomes based on agreements, common principles and quality assurance standards;
- d) enrollment of a student in a double-degree program is carried out on the basis of his application and in accordance with the concluded agreement (contract) with the partner university;
- e) the student goes through the enrollment procedure at the partner university;
- f) foreign students enrolled in the double-degree program undergo similar enrollment procedures in the general student body with a special note "included education" and indicating the period, duration of study, the number of disciplines and the volume of credits mastered.

Joint educational programs are developed on the basis of an agreement between two partner universities. When designing JEP, a set of disciplines or modules for studying at a partner university is determined. Disciplines studied at a



partner university are included in the diploma supplement indicating the name of the university.

**Parameter 13.** License number of the application for the training of personnel. This information is contained in the license, which is stored in the HR Department of KarU.

**Parameter 14.** Name of the accreditation body and the validity period of the OP accreditation. This information is contained in the accreditation certificate.

**Parameter 15.** The purpose of the EP. The purpose of the EP should reflect the following characteristics:

- a) be specific;
- b) be relevant;
- c) be achievable;
- d) be compatible with the mission and strategic goals of the university and the faculty.

**Parameter 16.** Qualification characteristics of the graduate. It includes the following information:

- a) List of graduate positions (in which positions the graduate can work);
- b) Scope and objects of the graduate's professional activity (in which organizations the graduate can work);
- c) Types of professional activity of the graduate (for example: educational, research, managerial, calculation and design, etc.);
- d) Functions of the graduate's professional activity (teaching, management, design, engineering, software maintenance, cybersecurity, legal support of business, etc.).

#### **Formatting the title page and the last page of the educational program**

The title page of the EP must indicate:

- Ministry of Science and Higher Education of the Republic of Kazakhstan (bold);
- Karaganda University named after Academician E.A. Buketov (bold);
- EP approval area (right);
- EP coordination area (left);
- EP identification area (center/bold);
- area indicating the city and year of development (center at the bottom of the page)

In the EP approval area, the words "APPROVED", the Chairman of the Board-Rector of Karaganda University named after E.A. Buketov, full name, space for signature and date are indicated.

In the EP coordination area, the words "AGREED", the position of the responsible person, the name of the employer organization, space for signature and date are indicated.

In the identification area, the Code, the Name of the EP, the Level of education are indicated;

The last page of the EP must indicate:

- Development group (full name, position, signature);
- Reference to the minutes of the Faculty Council meeting;



- Reference to the minutes of the Academic Council meeting;
- Reference to the minutes of the Board meeting;

Area for the signature of the Member of the Board-Vice-Rector for Academic Affairs, the Director of the Department for Academic Work, the Dean of the Faculty, as well as the head of the department, if he was not included in the development group.

The educational program should include navigation in the form of a structural element "Content" indicating the names of sections and the pages of their location.

**Stage 8. Development of the Educational Program Development Plan in accordance with Appendix 5.**

Конечно, вот перевод на английский:

The EP development plan is a separate document, the purpose of which is to promote the improvement of the quality of the conditions for the implementation of the educational program, taking into account the current requirements of the labor market and the achievements of modern science. The plan includes measures to improve the quality of the program content and the conditions for its implementation within 3-4 academic years. The plan is approved by the head of the department.

4. The procedure for reviewing and approving the educational program

The developed draft EP undergoes an examination by the Academic Council in accordance with paragraphs 5.2.1-5.2.3 of the "Regulations on the Academic Council". Based on the results of the examination, one of three conclusions can be made:

1. approve the EP draft;
2. revise the EP draft;
3. reject the EP draft.

In case of approval, the EP draft is sent to the Board for approval. The EP draft sent for revision may be re-considered at the initiative of the development group within 5 days. The duration of the EP draft revision process should not exceed 10 days. After approval, the approved educational program is entered into the Register of the Ministry of Education and Science of the Republic of Kazakhstan for external expertise. The EP included in the Register of the Ministry of Education and Science of the Republic of Kazakhstan is stored in one copy at the graduating department.

5. General requirements for the technical design of the educational program

- a) page format A4 (landscape);
  - b) font of the main text and page numbering: Times New Roman or Times New Roman KZ;
  - c) font size 12; when setting page numbers 10.
  - d) alignment by format;
  - e) single line spacing;
  - f) automatic hyphenation;
  - g) paragraph indentation 1 cm;
3. page parameters: top and bottom margin 2 cm, left 3 cm, right 1.5 cm.



6. Amendment of this Manual is carried out at the initiative of the Department of Academic Affairs after согласования with the member of the Board-Vice-Rector for Academic Affairs. The amended Manual is approved by the Chairman of the Board-Rector of the University.