APPROVED BY
Rector of the International University of
Information Technologies JSC
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REGULATIONS
ON THE DEVELOPMENT AND APPROVAL OF
EDUCATIONAL PROGRAMS
P-35
Revision 3

Approved at a meeting
of the Academic
Council dated
18.11.2020

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1 SCOPE

1.1 This Regulations on the development and approval of educational programs determines the structure, content, stages of development and approval of educational programs at the International University of Information Technologies JSC (hereinafter referred to as the University).

1.2 This Regulations are included in the list of internal regulatory documents of the University, is binding and is valid in all structural divisions of the University.

2 REGULATORY REFERENCES

This Regulations use references to the following regulatory documents:

2.1 Law of the Republic of Kazakhstan "On Education" (last amended on 07.07.2020);

2.2 State compulsory standard of higher and postgraduate education (Order of the Ministry of Education and Science of the Republic of Kazakhstan No. 604 dated October 31, 2018. (last amended on 05.05.2020);

2.3 Model rules for the activities of educational organizations implementing educational programs of higher and (or) postgraduate education (order of the Ministry of Education and Science of the Republic of Kazakhstan No. 595 dated October 30, 2018. (last amended on 18.05.2020));

2.4 Rules for organizing the educational process on credit technology of education (Order of the Ministry of Education and Science of the Republic of Kazakhstan No. 152 dated 20.04.2011 as amended on 12.10.2018.);

2.5 Rules for the organization and implementation of educational, methodological and scientific-methodological work (Order of the Ministry of Education and Science of the Republic of Kazakhstan No. 583 dated November 29, 2007 (last amended on 05.06.2019);

2.6 Algorithm for inclusion and exclusion of educational programs in the Register of educational programs of higher and postgraduate education (order of the Ministry of Education and Science of the Republic of Kazakhstan No. 665 dated December 4, 2018.);

2.7 Classifier of areas of training for personnel with higher and postgraduate education (order of the Ministry of Education and Science of the Republic of Kazakhstan No. 569 dated October 13, 2018 (last amended on 05.06.2020));

2.8 National Qualifications Framework, approved by the minutes of March 16, 2016 by the Republican Tripartite Commission on Social Partnership and Regulation of Social and Labor Relations;

2.9 Sectoral Qualifications Framework in the field of information and communication technologies, approved by minutes No. 1 of the meeting of the industry commission on social partnership and regulation of social and labor relations in the field of information and communication technologies dated December 20, 2016.

3 BASIC TERMS AND ABBREVIATIONS

3.1 Basic terms

In this Regulations, the following terms and definitions are used in accordance with regulatory documents:

Educational Program is a unified set of basic characteristics of education, including goals, results and content of training, organization of the educational process, ways and methods of their implementation, criteria for assessing educational outcomes;

Development of an Educational Program - planning of an educational program and its components in credit units, indicating educational outcomes and

relevant labor inputs, types of educational activities, teaching methods and assessment procedures/criteria;

Passport of the Educational Program - a brief description of the program, including a description of its connection with NQF, SQF and OS, educational outcomes and disciplines, as well as containing information regarding labor intensity, timing, language of study;

Register of Educational Programs of higher and postgraduate education (hereinafter referred to as the Register of EP of HPE) – an information system that includes a list of Passports of educational programs developed by higher educational institutions of the Republic of Kazakhstan;

Educational Outcomes - the amount of knowledge, skills and abilities acquired and demonstrated by students in mastering the educational program, confirmed by assessment, and the values and attitudes formed;

Competencies – the ability of students to practically apply the knowledge, skills and abilities acquired during the educational program in professional activities;

Module is an autonomous structural element of an educational program, complete from the point of view of educational outcomes, which has clearly formulated knowledge, skills, abilities and competencies acquired by students, and adequate assessment criteria.

Modular Educational Program is a training program that includes a set of training modules aimed at students mastering the key competencies necessary to obtain a certain academic degree and/or qualification.

Modular Education is a way of organizing the educational process based on the modular construction of an educational program, educational plan and academic disciplines;

Basic Educational Program (Major) – an educational program determined by the student to study in order to develop key competencies;

Additional Educational Program (Minor) – a set of disciplines and (or) modules and other types of educational work, determined by the student to study in order to develop additional competencies;

Current Educational Program - an educational program under which educational activities were carried out and at least 1 graduation was made;

New Educational Program – an educational program in which educational activities are ongoing, but there has been no graduation;

Innovative Educational Program - an educational program for which there are no analogues in the Republic of Kazakhstan, is being entered into the register for the first time.

Graduate Attributes (Graduate Model) - a complete set of characteristics that allows a graduate to successfully perform functions corresponding to his profession;

National Qualifications Framework (NQF) – a structured description of qualification levels recognized in the labor market;

Sectoral Qualification Framework (SQF) – a structured description of the qualification levels recognized in the sector;

Occupational Standard (OS) – a standard that defines, in a specific area of professional activity, the requirements for the level of qualifications and competence, for the content, quality and labor conditions;

Profession is a type of work activity that requires possession of a complex of special theoretical knowledge and practical skills acquired as a result of special training and work experience;

Profile – a set of basic typical features of a profession (area of training, specialty, specialization) that determine the specific focus of the educational program;

Labor function is an integral part of the type of labor activity, which is an integrated and relatively autonomous set of labor actions, defined business processes and presupposing the presence of the necessary competencies for their implementation;

Catalogue of Elective Disciplines (CED) is a systematized annotated list of all disciplines of the elective component for the entire period of study, containing their brief description indicating the purpose of study, summary content (main sections) and expected educational outcomes. The CED reflects the prerequisites and postrequisites of each academic discipline. The CED should provide students with the opportunity to alternatively choose academic disciplines of the elective component to form an individual educational trajectory.

Based on the educational program and CED, students with the help of advisers develop individual educational plans.

Educational Plan is a document regulating the list, sequence, volume (labor intensity) of academic subjects, academic disciplines and (or) modules, professional practice, other types of educational activities of students of the appropriate level of education and forms of control.

Individual Educational Plan (IEP) – an educational plan formed for each academic year by the student independently with the help of an adviser based on the educational program and catalogue of elective disciplines and (or) modules;

The IEP determines the individual educational trajectory of each student separately. The IEP includes disciplines and types of educational activities (practices, research/experimental work, forms of final certification) mandatory component (MC), university component (UC) and elective component (EC).

When determining an individual educational trajectory within the university component and (or) elective component, the student chooses disciplines in the Basic Educational Program (Major) and (or) in the Additional Educational Program (Minor).

Educational Work Plan (EWPl) – is an educational document developed by the university independently on the basis of the educational program and individual educational plans of students.

The EWPl determines the list of disciplines for the academic year and their labor intensity in credits, the order of study, types of training sessions and forms of control, as well as other types of educational activities (practices, state exam, writing and defending a thesis (project).

Model Educational Program (hereinafter referred to as MEP) is developed in the disciplines of the compulsory component of the GED cycle in undergraduate studies in accordance with subparagraph 5-2 of Article 5 of the Education Law.

Adviser is a teacher who performs the functions of an academic mentor studying in a relevant educational program, providing assistance in choosing an educational trajectory (formation of an individual curriculum) and mastering the educational program during the period of study.

University component is a list of compulsory academic disciplines determined by the university independently for mastering the educational program.

Elective component is a list of academic disciplines and the corresponding minimum amounts of academic credits offered by the university, independently selected by students in any academic period, taking into account their prerequisites and postrequisites.

Elective disciplines are academic disciplines included in the university component and the elective component within the framework of established academic credits and introduced by educational organizations, reflecting the individual preparation of the student, taking into account the specifics of socio-economic development and the needs of a particular region, established scientific schools.

Postrequisites – disciplines and (or) modules and other types of academic work, the study of which requires knowledge, abilities, skills and competencies acquired upon completion of the study of this discipline and (or) modules;

Prerequisites – disciplines and (or) modules and other types of academic work containing knowledge, abilities, skills and competencies necessary for mastering the discipline and (or) modules being studied;

3.2 Abbreviations

The following abbreviations are used in these Regulations

BD	Cycle of Basic Disciplines
BC	Basic Competence
BM	Basic Module
UC	University Component
HE	Higher Education
SCES	State Compulsory Educational Standard
AET	Additional Education Types
EQF	European Qualification Framework
ETF	European Training Foundation
KSA	Knowledge, Skills, Abilities
FAA	Final Academic Assessment
EC	Elective Component
ISCE	International Standard Classification of Education
NQF	National Qualifications Framework
NQS	National Qualifications System
GHM	General Humanities Module
MC	Mandatory Component
GEM	General Education Module
GED	Cycle of General Education Disciplines
EP	Educational Program
GPM	General Professional Module
SQF	Sectoral Qualification Framework
GEC	General Educational Competence
MD	Cycle of Major Disciplines
PI	Professional Internship
OS	Occupational Standard
PGE	Postgraduate Education
PC	Professional competence
PM	Professional Module
EO	Educational Outcome
QMS	Quality Management System

4 GENERAL PROVISIONS

4.1 Educational programs of higher and postgraduate education are developed and approved by the University independently in accordance with the requirements of SCES, the rules of credit technology of education, the classifier of areas of training and other regulatory legal acts in the field of higher and postgraduate education.

4.2 The state compulsory standard of higher and postgraduate education determines the requirements for the content of education with a focus on learning outcomes, the maximum volume of students' teaching load, the level of students' preparation and the duration of study in organizations of higher and (or) postgraduate education.

4.3 The content of educational programs of higher education includes the study of a cycle of general education disciplines, a cycle of basic disciplines, a cycle of major disciplines, as well as professional practice in relevant areas of personnel training with a focus on learning outcomes and compliance with the *National Qualifications Framework* and *Sectoral Qualification Framework*.

4.4 Educational programs of higher education include disciplines of a mandatory component and an elective component.

As part of the elective component, when determining an individual educational trajectory, a student can choose:

1) disciplines in the Basic Educational Program (Major);

2) disciplines in the Additional Educational Program (Minor).

The procedure for selecting and mastering disciplines in the basic and additional educational programs is carried out taking into account the availability of prerequisites.

The procedure for selecting and mastering disciplines in the Additional Educational Program is carried out to obtain additional competencies in related or specialized EPs, as well as to meet the personal needs of the student.

4.5 Educational programs are developed in accordance with the *National Qualifications Framework*, *Sectoral Qualification Framework*, *Occupational Standards* and Dublin Descriptors, aligned with the *European Qualifications Framework*.

4.6 Dublin descriptors are a description of the level and volume of knowledge, abilities, skills and competencies acquired by students upon completion of an educational program at the appropriate level (stage) of higher and postgraduate education, based on educational outcomes, developed competencies and academic credits.

4.7 Requirements for the level of training of students are determined on the basis of the Dublin Descriptors of the corresponding level of education (first level – bachelor's degree, second level – master's degree, third level - doctoral study) and reflect the mastered competencies expressed in the achieved educational outcomes.

Educational outcomes are formed both at the level of the entire educational program of higher education, and at the level of individual modules or academic discipline.

4.8 The Dublin Descriptors are based on five main educational outcomes:

- knowledge and understanding;
- putting knowledge and understanding into practice;
- ability to make judgments, evaluate ideas and formulate conclusions;
- communication skills;
- education skills.

Appendix 1 shows the Dublin Descriptors for each level of education, according to the Comprehensive Qualifications Framework of the European Higher Education Area[1].

Appendix 2 shows action verbs used to formulate specific educational outcomes according to B. Bloom's taxonomy of thinking skills.

4.9 Educational outcomes are the *expected* and *measurable* specific achievements of students, expressed in the language of knowledge, skills, abilities, competencies and which describe what the student will be able to demonstrate at the end of the educational period, module, academic discipline.

4.10 An educational program structured by modules, where each module is allocated a certain number of credit units and a form of control, creates opportunities for creating truly "flexible" programs that meet the requirements of the modern labor market[2].

The flexibility of the educational program is ensured through the use of a module construction mechanism in which the module is correlated with educational outcomes, measured and diagnosed over time, aimed at developing certain competencies of the educational program.

Students gradually understand the need to choose variable modules as they master basic modules and immerse themselves in a professional environment.

4.11 Modules in modular educational programs can be divided into the following types:

– *mandatory modules* consisting of basic disciplines that form general cultural competencies not related to the field of study;

– *mandatory modules in the field of training*, consisting of basic disciplines and professional disciplines that form the basis of the field of study and are aimed at developing basic and professional competencies;

– *elective modules* consisting of disciplines according to the profile, aimed at developing professional competencies in accordance with the orientation of the educational program on areas of knowledge and (or) specific types of activities within the framework of the field of training.

Optional modules allow to quickly respond to the requests of employers in order to ensure the demand for graduates by the professional community, to update professional guidance taking into account trends in the economic, scientific and technical development of the region and the country as a whole, taking into account the needs of real customers and strategic partners of the University. The inclusion of modules of this type in the educational program is one of the means of individualizing education, developing initiative and independence of students.

4.12 A module may consist of two or more academic disciplines or in combination of one or more disciplines with other types of academic work.

4.13 Professional practices, theses (projects), master's/doctoral dissertations (projects) are included in the relevant modules of the educational program.

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[1] Comprehensive Qualifications Framework of the European Higher Education Area https://enic-kazakhstan.kz/files/1560227434/ehea-paris-2018-communique-appendix-iii-952778.pdf
[2] Modular educational programs at a university: from theory to practice // https://cyberleninka.ru/article/n/modulnye-obrazovatelnye-programmy-v-vuze-ot-teorii-k-praktike/viewer

Moreover, each type of professional internship belongs to different modules.

4.14 Modular educational programs contribute to the creation of flexible educational structures both in content and in the organization of education.

4.15 Modular education allows to flexibly respond to the demands of the labor market not only by opening new educational programs, but by introducing new content modules into the programs being implemented.

5 PROCEDURE FOR DEVELOPING AN EDUCATIONAL PROGRAM

5.1 The development of educational programs for higher and postgraduate education consists of four (4) stages:

1) Planning an educational program.

2) Designing an educational program.

3) Developing structural elements of the educational program.

4) Assessing the quality of educational program development.

5.2 At the ***planning stage of opening an educational program***, a group of developers from the department conducts the following monitoring:

1) Determines current and future market needs: in-demand specialists are needed now and in the future; employment prospects for graduates (shortage or surplus).

2) Conducts an analysis of the personnel training market: competitors in the personnel training market in the region and nearby regions; strengths/weaknesses of competitors.

3) Conducts an analysis of the university's capabilities for implementing the EP: availability of necessary human resources; availability of necessary material, technical, information and financial resources.

5.3 The *Academic Committee* (AC), formed in the areas of personnel training and/or EP groups of higher and postgraduate education, participates in the development of educational programs of the University. The decision to create an AC is documented in the minutes of the Academic Council.

The purpose of AC is to identify a list of EPs, design, develop and improve EPs.

AC includes:

1) representatives of the university from among Faculty Members. To ensure an interdisciplinary approach, the AC involves representatives from both specialized academic departments and those providing general education and basic training;

2) representatives of students (bachelor's, master's, doctoral studies);

3) representatives of employers.

5.4 ***The educational program design stage*** is divided into the following sub-stages performed by the Academic Committee:

1) Research of the sphere of professional activity;

2) Construction of a competency model of a graduate of an educational program;

3) Formulation of program educational outcomes;

4) Determining the relationship between competencies, educational outcomes, assessment methods and criteria;

     5) *Determining resource needs.*

5.4.1 At the substage of researching the scope of professional activity, the AC analyzes documents to form an initial list of competencies of a graduate of an educational program: domestic and foreign National Qualifications Frameworks, Sectoral Qualifications Frameworks, occupational standards, SCES, job descriptions, etc.

5.4.2 At the next substage, a competency model of the EP graduate is built:

– General/general educational competencies are determined (personal, social,ethical, organizational and managerial, etc.).

– Basic and professional competencies are determined (theoretical and practical skills and abilities specific to a given area of training).

At this stage, to clarify and rank the list of competencies, a survey (questionnaire, interview and focus group) of employers, representatives of the surveyed field in which EP graduates will work, is conducted. Appendix 3 provides a sample questionnaire for an employer.

The competencies of a graduate of the educational program must comply with the Dublin Descriptors, SCES, NQF, SQF, and occupational standards.

In the EP developed on the basis of a occupational standard, the main labor functions are projected into the *professional competencies* of the EP.

Personal competencies from SQF are projected into *general, basic competencies of the EP*, professional competencies/basic labor functions from SQF, OS - respectively, into *professional competencies* of the EP.

The EP graduate's competency model is drawn up in accordance with the approved QMS form, F-69 (Appendix 4).

5.4.3 At the substage of formulating the learning outcomes of the educational program, the Academic Committee determines the educational outcomes that ensure the formation of competencies of the EP graduate that meet the requirements of occupational standards and (or) the requirements/expectations of employers.

Educational outcomes serve as the basis for determining the scope of EP and the amount of academic credit allocated to a given program. The EP must take into account the relationship between competencies, educational outcomes and academic credits.

When formulating educational outcomes, the guidelines listed in the European Credit Transfer System (ECTS) Guidelines should be followed:

1) Educational outcomes must adequately reflect the context, level, scope and content of the program.

2) Descriptions of educational outcomes must adequately reflect the context, level, range and content of the program.

3) Statements of educational outcomes should be brief and not too detailed.

4) Educational outcomes must be mutually agreed upon.

5) Educational outcomes must be clear and verifiable in terms of the student's achievements upon completion of the program.

6) Educational outcomes must be achievable within the specified amount of labor input.

7) Educational outcomes must be linked to appropriate educational activities, methods and assessment criteria.

8) There are no hard and fast rules regarding the ideal number of educational outcomes at the program level. Experience shows that it is advisable to indicate 10-12 educational outcomes.

A common way of formulating educational outcomes is based on three main elements:

− Use an active verb to express what students are expected to know and be able to do (for example, graduates can "describe", "apply", "summarize", "evaluate", "plan").

− Clarify what this outcome relates to (an object, a skill, for example, can explain "the function of a hard drive"; can present "a handmade living room design project").

− Specify how achievement of the educational outcomes can be demonstrated (e.g., "give a brief overview of the materials most commonly used in electrical engineering"; "develop a research algorithm using current scientific methods," etc.).

5.4.4 At the next substage, the relationships between competencies, educational outcomes, assessment methods and criteria are determined according to the Table in Appendix 4 to these Regulations. Each educational outcome must have criteria for assessing its achievability and be measurable.

The evaluation criterion must describe the "completed action", accordingly, assessment criteria are formed in the categories "knows", "can", "possesses" (for example, "knows" - reproduces and explains educational material with the required degree of scientific accuracy and completeness; "can" - solves typical problems based on the reproduction of standard solution algorithms; "possesses" - solves complex problems based on acquired knowledge, skills and abilities, with their application in atypical situations).

Appendix 5 provides an indicative list of assessment methods used to determine the attainability of educational outcomes and competencies.

For example, for the "Group Project" assessment method, the assessment criteria may be: viability, productivity, sustainability of the project, creation of real value and the realization of personal, professional and social aspirations.

5.4.5 At the substage of determining the need for resources, the necessary and sufficient amount of resources for the full implementation of the educational program is determined:

1) Human and social resources. The implementation of the EP is ensured by scientific and pedagogical personnel who have appropriate education confirmed by official documents. Requirements for the qualifications of scientific and pedagogical personnel are determined by the "Qualification requirements for educational activities", approved by order of the Ministry of Education and Science of the Republic of Kazakhstan No.391 dated 17.06.2015.

2) Material and technical base. The material and technical base of the educational process must comply with sanitary and fire safety rules and regulations, and be provided with the required equipment for conducting all types of educational, laboratory, practical and research work of students provided for by the educational plan.

3) Information and library provision. The educational program must be provided with educational and methodological resources for all educational courses, disciplines (modules).

4) Social resources. To implement the EP, social resources are also needed - established partnerships between the university and enterprises and organizations in the real sector of the economy; connections in the professional, pedagogical and business communities; connections with public associations and non-profit organizations expressing the interests of employers in this segment of the labor market and professional communities.

6   STRUCTURE AND CONTENT OF THE EDUCATIONAL PROGRAM

The structure of educational programs for bachelor's, master's and doctoral studies is given in the appendices to SCES of higher and postgraduate education.

The content of the EP of higher and postgraduate education consists of disciplines of three cycles - general education disciplines, basic disciplines and major disciplines.

The GED cycle includes disciplines of the mandatory component, the university component and (or) elective component. The BD and MD cycles include UC and EC disciplines.

UC and EC are determined by the university independently and take into account the needs of the labor market, the expectations of employers and the individual interests of the student.

The educational program is developed in three languages: Kazakh, Russian and English. It is considered at a meeting of AMB, AB, approved by the rector based on the decision of the Academic Board of the University.

The originals of educational programs, agreed upon and signed by the relevant heads of structural divisions and representatives of employers, are stored in the Methodological Division of the Department of Academic Affairs, copies are sent to departments for organizing the educational process.

The structure of the educational program of the University is issued in accordance with the approved QMS form, F-72, and includes the following components:

6.1   COVER PAGE (issued in accordance with Appendix 6).

6.2   DESCRIPTION OF THE EDUCATIONAL PROGRAM

This clause provides justification for the demand for graduates of the educational program.

6.3   PURPOSE AND OBJECTIVES OF THE EDUCATIONAL PROGRAM

The purpose of the educational program should be formulated as briefly as possible (in 1-3 sentences), specifically and clearly summarize the competencies that must be acquired by students.

6.4   PASSPORT OF THE EDUCATIONAL PROGRAM:

6.4.1   General information

This section includes information from the Competency Model of Educational Program Graduate, which is drawn up in accordance with the approved QMS form, F-69 (Appendix 4).

−   Code and classification of the field of education;

−   Code and classification of the area of training;

−   Group of educational programs;

−   Name of the Educational Program;

−   Purpose of the Educational Program;

−   Qualification characteristics of an EP graduate:

o Field of professional activity of the EP graduate;

o Objects of professional activity of EP graduates;

o Subject of professional activity;

o Types of professional activities of EP graduates;

o Functions of professional activity of the EP graduate;

– Level according to the International Standard Classification of Education;

– Level according to the National Classification Framework;

– Level according to the Sectoral Qualification Framework;

– Volume of loans;

– Academic degree awarded;

The awarded academic degree is indicated in accordance with Appendix 4 to the state compulsory standard of higher education "Names of awarded degrees in accordance with areas and levels of education."

– Table of relationships between EP graduate competencies, expected educational outcomes, assessment methods and criteria.

The following information is also indicated:

– Form of study;

– Language of study;

– EP Strategic Partners;

– Developer(s) and authors of the educational program.

6.4.2 Matrix for correlating the educational outcomes of the educational program with the competencies being developed.

6.4.3 Information about EP modules.

The name of the module, volume (labor intensity) of the module in credits, educational outcomes of the module, EO evaluation criteria, disciplines forming the module are indicated.

The list of educational modules is determined in accordance with the competency model of the EP graduate.

The structure of a module may consist of two or more structural units: disciplines, professional internship.

The educational outcomes of a module are what the learner must be able to do after successfully completing the module to demonstrate their knowledge, understanding, skills and/or competencies. The educational outcomes define the minimum requirements for the student to successfully complete the module.

When formulating educational outcomes, action verbs can be used, a non-exhaustive list of which is presented in Appendix 2.

As students progress through the program, educational outcomes should reflect the progressive nature of their education.

When formulating an EO module, it is imperative to take into account prior knowledge, available time and educational opportunities; avoid learning outcomes that are too broad or too narrow for the scope.

To achieve the expected educational outcomes of a graduate of an educational program, when forming modules and EP disciplines, it is necessary to implement the principle of constructive alignment of goals and educational outcomes by D. Biggs[3].

In student-centered education, the student must be at the center of teaching/learning and be an active participant in the learning and decision-making process.

6.4.4 Information about EP disciplines.

The name of the discipline, the cycle of the discipline, a brief description of the discipline (30-50 words), the labor intensity of the discipline in credits, the educational outcomes generated by the discipline, prerequisites, and postrequisites are indicated.

6.5 EDUCATIONAL PLAN OF THE EDUCATIONAL PROGRAM

Educational plans at the University are developed in two types: Educational Plan (EPl) for the entire period of study and Educational Work Plan (EWPl) for the current academic year.

The EP educational plan for the entire period of study is developed in accordance with SCES of higher and postgraduate education.

The EP educational plan is developed in three languages (Kazakh, Russian and English), according to the approved QMS form, F-73. EP EPl is considered at a meeting of the AMB, AB, approved by the rector based on the decision of the University AB.

The educational plan determines the list and sequence of mastering disciplines/modules, practices, research work, intermediate and state final certifications, their labor intensity in credits and academic hours, the distribution of lectures, practical, laboratory classes and independent work of the student, prerequisites and forms of control.

The educational plan provides a logical sequence of studying disciplines, based on their continuity and rational distribution of disciplines across semesters.

The distribution of hours of classroom and independent work of students is carried out on the basis of distribution standards approved by the Academic Board of the University, specified in Appendix 7 for Bachelor's programs, in Appendix 8 for Master's and Doctoral programs.

The volume of classroom work is at least 30% of the volume of each discipline.

The educational plan provides a summary table of indicators of the volume of credits of the educational program in the context of cycles of disciplines and semesters of study.

The work educational plan for the current academic year is developed on the basis of the educational plan of the educational program and individual educational plans of students.

The EWPl determines the list of disciplines for the academic year and their labor intensity in credits, the order of study, types of training sessions and forms of control, as well as other types of educational activities.

The EWPl is developed according to the approved QMS form, F-74. The EWPl is considered at a meeting of AMB, AB, and approved by the rector based on the decision of the University AB.

The originals of EPl, EWPls for undergraduate educational programs are stored in the Methodological Division of the Department of Academic Affairs, Master's and doctoral studies for educational programs are stored in Continuing Professional Education, copies are sent to departments for organizing the educational process.

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[3] Klushina N.P. Development of a system for assessing the development of competencies among undergraduates
in the context of the concept of constructive alignment by D. Biggs //
https://www.ncfu.ru/export/uploads/Dokumenty- Nauka/SKFUelibrary_29356557_62559640.pdf

6.6   ADDITIONAL EDUCATIONAL PROGRAMS (MINOR)

This section identifies Additional Educational Programs (AEPs) that students of other educational programs can choose to obtain any competencies under this EP. The volume of AEPs credits can be 15-20 credits, i.e. 3-4 disciplines. The AEPs indicate the list of disciplines that form the Minor, the number of credits in the discipline and the semester of study.

6.7   SHEET OF APPROVAL WITH DEVELOPERS

Together with the development of the educational program, a Catalogue of Elective Disciplines of the educational program and a Development Plan of the educational program are being developed.

7   CATALOGUE OF ELECTIVE DISCIPLINES

The catalogue of elective disciplines (CED) is compiled for each educational program separately and is a systematic annotated list of all disciplines of the elective component for the entire period of study, containing their brief description indicating the purpose of study, summary content (main sections) and expected results of study (acquired students' knowledge, abilities, skills and competencies).

CED is being developed by the graduating department in accordance with the Rules for the formation of a catalogue of elective disciplines, P-56, and in accordance with the approved QMS form, F-71, in three languages: Kazakh, Russian, English. The CED is reviewed at a meeting of the AMB and approved by the Vice-Rector for Academic and Educational Activities of the University based on the decision of the AMB.

When drawing up the CED of the educational program, trends in the development of science and technology, market needs and the requests of consumers of the University's educational services should be taken into account.

The CED of the educational program must meet the following requirements:

−   Elective disciplines are determined in accordance with the need for students to master professional competencies defined in the educational program in accordance with occupational standards and SCES;

−   The order of studying elective disciplines is carried out in accordance with the logic of the academic relationship and sequence of studying disciplines, that is, indicating prerequisites and postrequisites;

The CED should provide students with the opportunity to alternatively choose elective academic disciplines to form an individual educational trajectory.

Based on the educational program and CED, students with the help of advisers develop individual educational plans.

8   EDUCATIONAL PROGRAM DEVELOPMENT PLAN

The main goal of the educational program development plan is to improve the content of the educational program in accordance with modern labor market trends, taking into account the development of science, technology, culture, economics, technology and the socio-cultural sphere.

The educational program development plan is developed by the Academic Committee in accordance with the approved QMS form, F-70, a sample is presented in Appendix 9. The EP development plan is considered at a meeting of AMB, AB, approved by the rector based on the decision of the Academic Council of the University.

Changes in the educational program are carried out under the leadership of the head of the graduating department and are discussed at the educational and methodological board of the university.

9 REQUIREMENTS FOR DESIGN OF THE EDUCATIONAL PROGRAM

It is recommended that the structural elements of the EP be drawn up in accordance with the Appendices to this Regulation and the approved QMS forms.

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Font: *Times New Roman.*

Point size: *12.*

Line spacing: *single.*

10 REGULATIONS FOR APPROVAL AND UPDATE OF THE EDUCATIONAL PROGRAM

10.1 The development of the educational program is carried out by the Academic Committee, the composition of which is approved by the decision of the Academic Board of the University. The Academic Committee includes scientific and pedagogical employees, representatives of employers, students and other interested parties.

10.2 The Chairman of the Academic Committee at a meeting of the University's educational and methodological board presents the rationale for the need to open a new educational program or update an existing educational program.

10.3 If the decision is positive, the Academic Committee will begin developing/updating the EP.

10.4 The developed/updated educational program is agreed upon with representatives of employers and approved by the Academic Committee of the University. The approval procedure and the decision on approval are formalized in a protocol.

10.5 The developed/updated educational program is checked for plagiarism.

10.6 The developed/updated EP undergoes internal and external examination. Internal examination is carried out by leading faculty members and students (students, master's students, doctoral students). External examination is carried out by representatives of Associations, employers, strategic partners, representatives of business structures, representatives of other universities, educational organizations in the region.

During the examination of EP, the demand for EP in the labor market, achievement of the goal and implementation of EP tasks, completeness and logic of building EP, achievement of learning outcomes by students and their compliance with the requirements of professional standards, compliance with the requirements of regulatory legal acts in the field of education are assessed.

Based on the results of external and internal examination, written expert opinions with relevant recommendations are issued:

- confirm / approve EP;

- revise the EP indicating deadlines.

10.7 An educational program that has received positive examination results is submitted for consideration and approval at a meeting of the Educational and Methodological Board and then the Academic Board of the University.

10.8 The approved educational program is sent for inclusion in the Register of EP of HPE of the Ministry of Education and Science of the Republic of Kazakhstan.

10.9 In the absence of a license in the direction of preparation of the educational program, the department of academic affairs (for undergraduate studies) or the department of

postgraduate education (for master's and doctoral studies) sends an application to the Ministry of Education and Science of the Republic of Kazakhstan to obtain an annex to the license in the relevant field of training.

10.10 The methodological manual MM-01 "Licensing of educational activities" defines the procedure for obtaining a license for educational activities in accordance with the Qualification requirements for educational activities, approved by Order of the Ministry of Education and Science of the Republic of Kazakhstan dated June 17, 2015 No. 391 (last amended on July 01, 2020.).

Educational outcomes	First level of study (bachelor's degree)	Second level of study (master's degree)	Third level of study (PhD doctorate)
1. Knowledge and understanding	– demonstrate knowledge and ability to understand the area being studied, based on advanced knowledge in the area being studied; – know the methods of scientific research and academic writing and apply them to the area being studied; – understand the importance of principles and culture of the academic integrity.	– demonstrate developing knowledge and understanding of the subject being studied areas based on advanced knowledge of the area in developing and/or applying ideas in the research context;	– demonstrate a systematic understanding of the area of study, mastery of the skills and research methods used in this area;
2. Putting knowledge and understanding into practice	– apply knowledge and understanding abilities at a professional level, formulate argue and solve problems in the area being studied; – apply theoretical and practical knowledge to solve educational, practical and professional problems in the area being studied; – apply knowledge and understanding of facts, phenomena, theories and complex dependencies between them in the area being studied;	– apply knowledge, understanding and ability to solve problems in a new environment, in wider interdisciplinary context;	– demonstrate the ability to think, design, implement and adapt a significant research process with a scientific approach;
3. Ability to make judgments, evaluate ideas and	– collect and interpret information to form judgments, taking into account	collect and interpret information to form judgments, taking into account	– contribute by own original research to expand the boundaries of the scientific area,

formulate conclusions	social, ethical and scientific considerations;	social, ethical and scientific considerations;	which deserves publication at the national or international level; − critically analyze, evaluate and synthesize new and complex ideas;
4. Communication skills	− communicate information, ideas, problems and solutions to both specialized and non-specialized audiences	− communicate information, ideas, findings, problems and solutions clearly and unambiguously to both specialists and non-specialists;	− communicate knowledge and achievements to colleagues, the scientific community and the general public;
5. Self-study	− learning skills necessary to independently continue further education in the area being studied;	learning skills necessary to independently continue further education in the area being studied.	− promote, in an academic and professional context, the technological, social or cultural development of society based on knowledge.

Appendix 2
**Non-exhaustive list of action verbs used to formulate specific educational outcomes
according to B. Bloom's taxonomy of thinking skills**

Skill	Definition	Illustrative verb that can be used
Knowledge	Learned information stored in memory	compose, define, describe, duplicate, identify, label, list, match, remember, name, establish order, highlight, recognize, find relationships, remember, repeat, reproduce, select, establish
Understanding	Understanding the meaning of information	classify, transform, justify, describe, discuss, distinguish, evaluate, explain, express, expand, generalize, give examples, define, indicate, infer, locate, paraphrase, predict, recognize, edit, report, establish again, consider, select , summarize, translate
Application	Applying knowledge to actual situations	apply, modify, select, calculate, demonstrate, discover, stage, use, illustrate, interpret, influence, change, manipulate, try, predict, prepare, produce, relate, outline, show, sketch, decide, use, write
Analysis	Breaking down objects or ideas into simpler components and considering how those components connected and ordered	analyze, evaluate, subdivide, calculate, categorize, compare, contrast, criticize, diagram, differentiate, distinguish, recognize, explore, experiment, define, illustrate, infer, model, highlight, point out, interrogate, relate, select, divide, subdivide , experience
Synthesis	Converting components of ideas/concepts into something new	distribute, collect, categorize, select, combine, agree, compose, construct, create, design, develop, invent, explain, formulate, produce, combine, regulate, change, organize, plan, prepare, propose, rebuild, restore, connect, reorganize, revise, rewrite, arrange, summarize, synthesize, tell, write
Assessment	Compilation judgments based on internal evidence or external criteria	define, challenge, evaluate, relate, select, compare, complete, contrast, defend, describe, distinguish, calculate, establish, explain, judge, justify, interpret, relate, predict, consider, select, summarize, support, rate

Appendix 3
Sample Questionnaire for Employers[4]

The questions in this survey focus on the *skills and competencies* that may be necessary for success in a career in_____

_____ .

<div align="center">(specify area of knowledge)</div>

Please answer all questions. Your answers will serve the purpose of improving educational programs for future students specializing in this program.

<div align="center">***Thank you for your cooperation!***</div>

1. Name of the organization: _____

2. Respondent's position: _____

3. Number of employees: _____

 4. Do you feel that the university has provided your employee with the proper training to work for your company _____

_____ ?

<div align="center">(specify area of knowledge)</div>

1) to a very large extent_____

2) to a large extent_____

3) to some extent_____

4) to a small extent_____

5) to a very small extent_____

For each of the following skills, rate:

- **the importance** of the skill or competency to the job in your organization;

- **the level** of development of each skill or competency provided at the university by educational programs for a degree in (specify the name of the area).

In the blank spaces, you can indicate other skills that are not included in the list, but, in your opinion, are important.

<div align="center">

Use the following scale:
1 = none; 2 = weak; 3 = significant; 4 = strong

</div>

No.	Skill/competence	Importance	Level provided by university training
1.	Ability to analyze and synthesize	1 2 3 4	1 2 3 4
2.	Ability to apply knowledge in practice	1 2 3 4	1 2 3 4
3.	Planning and time management	1 2 3 4	1 2 3 4
4.	Basic knowledge of self-study	1 2 3 4	1 2 3 4
5.	Thorough training in the basics of the profession	1 2 3 4	1 2 3 4
6.	Written and oral communication in native language	1 2 3 4	1 2 3 4
7.	Knowledge of a second language	1 2 3 4	1 2 3 4
8.	Basic computer skills	1 2 3 4	1 2 3 4
9.	Research skills	1 2 3 4	1 2 3 4

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[4]Methodological recommendations for the development of graduate models and design of educational plans in higher educational institutions of the Kyrgyz Republic based on the competency-based approach https://soros.kg/srs/wp-content/uploads/2019/08/recomendations_competent.pdf

10.	Ability to study	1 2 3 4	1 2 3 4
11.	Information skills (ability to find and analyze information from various sources)	1 2 3 4	1 2 3 4
12.	Ability to criticize and self-criticize	1 2 3 4	1 2 3 4
13.	Ability to adapt to new situations	1 2 3 4	1 2 3 4
14.	Ability to come up with new ideas (creativity)	1 2 3 4	1 2 3 4
15.	Problem solving	1 2 3 4	1 2 3 4
16.	Making decisions	1 2 3 4	1 2 3 4
17.	Teamwork	1 2 3 4	1 2 3 4
18.	Interpersonal skills	1 2 3 4	1 2 3 4
19.	Leadership	1 2 3 4	1 2 3 4
20.	Ability to work in a multidisciplinary team	1 2 3 4	1 2 3 4
21.	Ability to communicate with non-experts (in this area)	1 2 3 4	1 2 3 4
22.	Acceptance of differences and multiculturalism	1 2 3 4	1 2 3 4
23.	Ability to work in an international environment	1 2 3 4	1 2 3 4
24.	Understanding the culture and customs of other countries	1 2 3 4	1 2 3 4
25.	Ability to work independently	1 2 3 4	1 2 3 4
26.	Project development and project management	1 2 3 4	1 2 3 4
27.	Initiative and entrepreneurial spirit	1 2 3 4	1 2 3 4
28.	Commitment to ethical values	1 2 3 4	1 2 3 4
29.	Care about quality	1 2 3 4	1 2 3 4
30.	Striving for success	1 2 3 4	1 2 3 4
31.		1 2 3 4	1 2 3 4
32.		1 2 3 4	1 2 3 4
33.		1 2 3 4	1 2 3 4

Please rank the five most important competencies (in your opinion). Indicate the numbers of the relevant competencies from the most important on the first line to the least important on the last.

1. Competence number_____
2. Competence number_____
3. Competence number_____
4. Competence number_____
5. Competence number_____

Thank you for your cooperation!

ХАЛЫҚАРАЛЫҚ УНИВЕРСИТЕТІ   МЕЖДУНАРОДНЫЙ УНИВЕРСИТЕТ

INTERNATIONAL UNIVERSITY

Chairman of the Academic Committee	Chairman of the AMB of IITU JSC
_____	_____
_____ _____,20____.	_____ _____,20____.
Employer	Employer
_____	_____
___	___
_____ _____,20____.	_____ _____,20____.

COMPETENCY MODEL OF
EDUCATIONAL PROGRAM GRADUATE

Code and classification of the field of education_____

Code and classification of the area of training_____

Group of educational programs_____

Name of the Educational Program_____

Purpose of the Educational Program_____

Qualification characteristics of an EP graduate:

- – Field of professional activity of the EP graduate;
- – Objects of professional activity of EP graduates;
- – Subject of professional activity;
- – Types of professional activities of the EP graduate;
- – Functions of professional activity of the EP graduate;

Level according to the International Standard Classification of Education_____

Level according to the National Classification Framework_____

Level according to the Sectoral Qualification Framework_____

Volume of loans _____

Academic degree awarded_____

Table of relationships between competencies,
educational outcomes, assessment methods and criteria

Dublin Descriptors	Competencies of an EP graduate	Competencies expressed in expected educational outcomes	Assessment criteria	Name of assessment method
General educational competencies				
1. Knowledge and understanding	Competence 1	Educational outcome 1	Assessment criterion 1.1 ...	

			Assessment criterion 1.m	
		Educational outcome 2	Assessment criterion 2.1	
			...	
			Assessment criterion 2.m	
...	...	...	...	...
5. Self-study	Competence N	Educational outcome N-1	Assessment criterion N-1.1	
			...	
			Assessment criterion N-1.m	
		Educational outcome N	Assessment criterion N.1	
			...	
			Assessment criterion N.m	
Basic competencies				
1. Knowledge and understanding	Competence 1	Educational outcome 1	Assessment criterion 1.1	
			...	
			Assessment criterion 1.m	
		Educational outcome 2	Assessment criterion 2.1	
			...	
			Assessment criterion 2.m	
...	...	...	...	...
5. Self-study	Competence N	Educational outcome N-1	Assessment criterion N-1.1	
			...	
			Assessment criterion N-1.m	
		Educational outcome N	Assessment criterion N.1	
			...	
			Assessment criterion N.m	
Professional competencies				
1. Knowledge and understanding	Competence 1	Educational outcome 1	Assessment criterion 1.1	
			...	
			Assessment criterion 1.m	
		Educational outcome 2	Assessment criterion 2.1	
			...	
			Assessment criterion 2.m	
...	...	...	...	...
5. Self-study	Competence N	Educational outcome N-1	Assessment criterion N-1.1	
			...	
			Assessment criterion N-1.m	
		Educational outcome N	Assessment criterion N.1	
			...	

			Assessment criterion N.m	

Appendix 5
Sample list of assessment methods [5]

S No.	Name of assessment method	Brief description of the assessment method	Presentation of the assessment method in the educational process
1	Business and/or role-playing game	Joint activity of a group of students and a teaching worker under the control of a teaching worker in order to solve educational and professionally oriented problems through game modeling of a real problem situation. Allows to assess the ability to analyze and solve typical professional problems.	Topic (problem), concept, roles and expected result for each game
2	Case problem	A problem-based task in which the student is asked to comprehend a real professionally-oriented situation necessary to solve a given problem by solving several problems. Allows to assess the level of acquisition of knowledge, skills and readiness for work activities with the ability to solve atypical professional tasks.	Tasks for solving a case problem
3	Colloquium	A means of monitoring the assimilation of educational material of a topic, section or sections of a discipline, organized as a training session in the form of an interview between a teacher and students. Allows to assess knowledge.	Questions on topics/sections of the discipline
4	Module test	A tool for testing the ability to apply acquired knowledge to solve problems of a certain type on a topic or section	Set of control tasks for options
5	Round table, discussion, controversy, dispute, debate	Assessment tools that allow students to be included in the process of discussing a controversial issue or problem and assess their ability to argue their own point of view. An interactive form of training that allows	List of discussion topics for holding a round table, discussion, controversy, disputation, debate
6	Portfolio	A targeted selection of student works, revealing his individual educational achievements in one or more academic disciplines, as well as other achievements in the field of science, experience of speaking at various conferences, symposiums. Allows to assess achievements in self-study and personal development and shows specific abilities to apply knowledge and skills and demonstrates the level of their proficiency.	Portfolio structure
7	Project	The final product obtained as a result of planning and executing a set of educational and research tasks. Allows to assess students' ability to independently construct their knowledge in the process of solving practical problems and assess the level of development of analytical, research skills, as well as practical and creative thinking skills, which will make it possible to perform professional work activities. When performing a course design,	Topics for group and/or individual projects

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[5]S.V. Oskin Methodological recommendations on the procedure for assessing knowledge, abilities, skills and experience at the stages of developing competencies //
https://kubsau.ru/upload/iblock/8d1/8d16a59faa1f2e97e7383a8c3c81c739.pdf

		the result is assessed higher if the project includes not only a theoretical, technical (research, calculation) part, but also a practical part (making a layout, parts, etc. with your own hands).	
8	Laboratory work with physical or virtual equipment	Can be performed individually or by a group of students. Laboratory tasks should include an element of creativity and teamwork. There is a project task (it is better to formulate it this way, and not a description of the progress of laboratory work), there is a completion time, there is a moderator in the person of a teacher who can direct the team's reasoning and actions in the right direction. Allows to assess students' ability to independently construct their knowledge in the process of solving practical problems and assess the level of development of analytical, research skills, as well as practical and creative thinking skills. Allows to assess the ability to perform professional work actions.	Individual or group tasks
9	Workbook	A didactic complex designed for independent work of the student and allowing to assess the level of assimilation of knowledge and educational material.	Sample workbook
10	Multi-level tasks and assignments	The following tasks and assignments are distinguished: a) of a reproductive level, allowing to assess and diagnose knowledge of factual material (basic concepts, algorithms, facts) and the ability to correctly use special terms and concepts, recognition of objects of study within a certain section of the discipline; b) of a reconstructive level, allowing to assess and diagnose the ability to synthesize, analyze, generalize factual and theoretical material with the formulation of specific conclusions, establishing cause-and-effect relationships; c) of a creative level, allowing to evaluate and diagnose skills, integrate knowledge of various fields, argue one's own point of view, which allows one to assess the ability to work.	A set of multi-level tasks and assignments
11	Calculation and graphic work	A tool for testing the ability to apply acquired knowledge using a predetermined methodology to solve tasks or assignments for a module or discipline as a whole.	A set of tasks for performing calculation and graphic work
12	Reference paper	A product of a student's independent work, which is a brief written summary of the results of a theoretical analysis of a certain scientific (educational and research) topic, where the author shows the ability to reveal the essence of the problem under study, gives various points of view, as well as his own views on it.	Topics of reference papers
13	Report, communication	A product of a student's independent work, which is a public speech presenting the results obtained on a certain educational-practical, educational-research or scientific topic. Shows the ability to reveal the essence of the problem under study.	Topics of reports, communications

14	Interview	A control tool organized as a special conversation between a teacher and a student on topics related to the discipline being studied, and designed to determine the amount of knowledge of the student in a specific section, topic, problem, etc.	Questions on topics/sections of the discipline
15	Creative assignment	A partially regulated task that has a non-standard solution and allows to diagnose skills, integrate knowledge of various areas, and argue your own point of view. Can be performed individually or by a group of students. The ability to perform work is assessed.	Topics for group and/or individual creative assignments
16	Test	A system of standardized tasks that allows to automate the procedure for measuring the student's level of knowledge and skills.	Test assignment fund
17	Simulator	A technical tool that can be used to control the professional skills and abilities acquired by a student in managing a specific material object.	A set of tasks for working on the simulator
18	Essay	A tool that allows you to assess the student's ability to express in writing the essence of the problem posed, to independently analyze this problem using the concepts and analytical tools (proficient) of the relevant discipline, to draw conclusions summarizing the author's position on the problem posed.	Essay subject

Appendix 6
Cover page of the educational program

ХАЛЫҚАРАЛЫҚ УНИВЕРСИТЕТІ **IT** МЕЖДУНАРОДНЫЙ УНИВЕРСИТЕТ
INTERNATIONAL UNIVERSITY

AGREED BY	APPROVED BY
Chairman of the Educational and	Rector of
Methodological Board of IITU JSC	International University of
	Information Technologies JSC

<table>
<tr><td>_____Full name</td><td>_____Full name</td></tr>
<tr><td>_____,__20_.</td><td>_____,__20_.</td></tr>
</table>

EDUCATIONAL PROGRAM

_____

(code, name of the educational program)

Code and classification of the field of education: _____

Code and classification of the area of training: _____

Group of educational programs: _____

Level according to the ISCE: _____

Level according to the NQF: _____

Level according to the SQF: _____

Duration of study: _____

Volume of loans: _____

AGREED BY	AGREED BY
Representatives of industry associations of	Representatives of industry associations of
employers,	employers,
representatives of IT companies	representatives of IT companies

<table>
<tr><td>_____Full name</td><td>_____Full name</td></tr>
<tr><td>_____,__20_.</td><td>_____,__20_.</td></tr>
</table>

Almaty, 20_____

Appendix 7
Distribution norms for classroom and independent work of students
(BACHELOR DEGREE COURSE)

Number of credits ECTS	Total academic hours	Number of classroom hours				Weekly load	Number of hours of student's independent work		
		Total	including			l/pr/lab	Total student's independent work	student's independent work under the guidance of a teacher	student's independent work
			lectures	practical (seminars)	Laboratory				
2	**60**	**30**	15	15		**1/1/0**	**30**	15	15
2	**60**	**30**	15		15	**1/0/1**	**30**	15	15
2	**60**	**30**		30		**0/2/0**	**30**	15	15
3	**90**	**30**	15	15		**1/1/0**	**60**	15	45
3	**90**	**30**	15		15	**1/0/1**	**60**	15	45
3	**90**	**30**	15		15	**1/0/1**	**60**	15	45
3	**90**	**30**		30		**0/2/0**	**60**	15	45
4	**120**	**45**	15	30		**½/2/0**	**75**	15	60
4	**120**	**45**	15	15	15	**1/1/1**	**75**	15	60
4	**120**	**45**	30		15	**2/0/1**	**75**	15	60
4	**120**	**45**	30	15		**2/1/0**	**75**	15	60
4	**120**	**45**		45		**0/3/0**	**75**	15	60
5	**150**	**45**	15	30		**½/2/0**	**105**	15	90
5	**150**	**45**	15	15	15	**1/1/1**	**105**	15	90
5	**150**	**45**	30		15	**2/0/1**	**105**	15	90
5	**150**	**45**	30	15		**2/1/0**	**105**	15	90
5	**150**	**45**	15	15	15	**1/1/1**	**105**	15	90
5	**150**	**45**		45		**0/3/0**	**105**	15	90
5	**150**	**45**	15		30	**1/0/2**	**105**	15	90
6	**180**	**60**	15	15	30	**1/1/2**	**120**	30	90
6	**180**	**60**	15	30	15	**½/2/1**	**120**	30	90
6	**180**	**60**	30	15	15	**2/1/1**	**120**	30	90
6	**180**	**60**	30	30		**2/2/0**	**120**	30	90
6	**180**	**60**			60	**0/0/4**	**120**	30	90
6	**180**	**60**		60		**0/4/0**	**120**	30	90
7	**210**	**75**	15	30	30	**½/2/2**	**135**	30	105
7	**210**	**75**	15	60		**¼/4/0**	**135**	30	105
7	**210**	**75**	15		60	**1/0/4**	**135**	30	105
7	**210**	**75**	30	30	15	**2/2/1**	**135**	30	105
7	**210**	**75**	30	15	30	**2/1/2**	**135**	30	105
7	**210**	**75**		30	45	**0/2/3**	**135**	30	105
7	**210**	**75**		75		**0/5/0**	**135**	30	105

P-35, Regulations on the development and approval of educational programs

8	240					0/0/0	240	60	180
10	300					0/0/0	300	60	240
12	360					0/0/0	360	60	300
15	450					0/0/0	450	60	390
20	600					0/0/0	600	60	540

Appendix 8
Distribution norms for classroom and independent work of students
(MASTER'S DEGREE COURSE and DOCTORAL COURSE)

Number of credits ECTS	Total academic hours	Number of classroom hours				Weekly load	Number of hours of student's independent work		
		Total	including				Total student's independent work	Including	
			lectures	practical (seminars)	Laboratory	l/pr/lab		student's independent work under the guidance of a teacher	student's independent work
3	90	15	15			1/1/0	75	15	60
3	90	15		15		0/1/0	75	15	60
3	90	15			15	0/0/1	75	15	60
4	120	30	15	15		1/1/0	90	15	75
4	120	30	15		15	1/0/1	90	15	75
4	120	30		15	15	0/1/1	90	15	75
4	120	30	30			2/0/0	90	15	75
4	120	30		30		0/2/0	90	15	75
4	120	30			30	0/0/2	90	15	75
5	150	45	15	15	15	1/1/2	105	15	75
5	150	45	15	30		1/2/0	105	15	75
5	150	45	15		30	1/0/2	105	15	75
5	150	45	30	15		2/1/0	105	15	75
5	150	45		15	30	0/1/2	105	15	75
5	150	45		30	15	0/2/1	105	15	75
5	150	45		45		0/3/0	105	15	75
5	150	45			45	0/0/3	105	15	75
6	180	60	30	15	15	2/1/1	120	30	90
6	180	60	15	15	30	1/1/2	120	30	90
6	180	60	15	30	15	1/2/1	120	30	90
6	180	60	30		30	2/0/2	120	30	90
6	180	60	30	30		2/2/0	120	30	90
6	180	60	30		30	2/0/2	120	30	90
6	180	60		30	30	0/2/2	120	30	90
6	180	60		60		0/4/0	120	30	90
6	180	60			60	0/0/4	120	30	90
7	210	75	15	30	30	1/2/2	135	30	120
7	210	75	15	60		1/4/0	135	30	120
7	210	75	15		60	1/0/4	135	30	120
7	210	75	30	30	15	2/2/1	135	30	120
7	210	75	30	15	30	2/1/2	135	30	120
7	210	75	30	45		2/3/0	135	30	120
7	210	75	45	30		3/2/0	135	30	120
7	210	75		30	45	0/2/3	135	30	120
7	210	75		45	30	0/3/2	135	30	120
7	210	75		75		0/5/0	135	30	120
7	210	75			75	0/0/5	135	30	120
7	210	75	75			5/0/0	135	30	120

P-35, Regulations on the development and approval of educational programs

8	**240**					**0/0/0**	**240**	60	180
10	**300**					**0/0/0**	**300**	60	240
12	**360**					**0/0/0**	**360**	60	300
15	**450**					**0/0/0**	**450**	90	360
20	**600**					**0/0/0**	**600**	90	510
30	**900**					**0/0/0**	**900**	180	720

Agreed by
Chairman of AMB

_____Full name

_____ _____, 20___.

Agreed by
Chairman of the Academic Committee

_____Full name

_____ _____, 20___.

Approved by
Rector of IITU JSC

_____Full name

_____ _____, 20___.

**EDUCATIONAL
PROGRAM DEVELOPMENT PLAN**

for 20__-20__

No.	Name of the activity	Timeframe for completing the activity					Responsible	Result
		2020	2021	2022	2023	2024		
1. Analysis of the current situation								
1.	Making a decision on the type of EP (current, new, innovative, interdisciplinary, additional EP (Minor), joint EP, double-diploma EP)	C -1 N – I -	C – 1	C- 1 N- 1 JEP- 1	C- 1 N- 1 JEP- 1	C-1 N – 1 JEP- 1 I – 1 DD – 1	Academic Committee, Department	EP
2.	Monitoring the regional labor market and the demands of consumers of educational services	annually	annually	annually	annually	annually	Department, Dean's Offices	Questionnaire report

[6] Regulations for the development and approval of EP, Bolashak University, Ministry of Education and Science of the Republic of Kazakhstan // http://bolashak-edu.kz/upload/files2/op_polojenie.pdf

3.	Analysis of EP for compliance with the strategic development plan of the university	annually	annually	annually	annually	annually	Department, Academic Committee	Minutes of meetings of departments, Academic Committee
4.	Analysis of the availability of material and technical base and other resources for the formation of EP	annually	annually	annually	annually	annually	Department	Application for the purchase of UML, laboratory equipment, etc.
5.	Analysis of the availability of Faculty Members with appropriate potential for the development of EP	annually	annually	annually	annually	annually	Department	Department Faculty Members Registration Form
EP development								
1.	Studying regulatory legal acts in the field of education, NQF, SQF, occupational standards							Developed educational and methodological documentation of the department for EP
2.	Identification of strategic partners for the development of EP							Agreements, memorandums
3.	Formation of a competency model of an EP graduate that corresponds to Dublin Descriptors and meets the needs of employers							Competency model of EP graduate
4.	Formation of a table of relationships between competencies, planned educational outcomes, assessment methods and criteria							Approved competency model of EP graduate
5.	Development of EP passport							EP passport
6.	Drawing up an EP educational plan							EP EPl
7.	Updating the purpose of the EP							Updated EP purpose
8.	Formation of a catalogue of elective disciplines that correspond to the planned educational outcomes of the EP, taking into account the requirements of employers and the requests of students							Approved CED

№										
9.	Development of Syllabuses, teaching materials									Approved Syllabuses, teaching materials for all EPl disciplines
10.	Providing each student with the opportunity to choose and form an individual educational trajectory									Student's IEP
11.	Providing each student with the right to choose a teacher for the discipline									Student's IEP
12.	Implementation of practice-oriented training									Memorandum of cooperation, department branches
13.	Implementation of student-centered training									Teaching materials, Open classes, Mutual visits
14.	Activation of internal academic mobility of Faculty Members and students									Agreements, Report on academic mobility by semester
Improving the structure and content of EP										
1.	Adjustment of the EP in accordance with the changed requirements of the labor market and the demands of service consumers (Conducting joint seminars, presentations, round tables to determine ways to develop and improve the EP, etc.)									Minutes
2.	Development of educational programs with an additional educational trajectory (specialization)									Minutes of the department, Academic Committee, EP AMB

3.	Development of joint educational programs							JEP
4.	Development of EP for multilingual education							EP
5.	EP development in English							EP
6.	Development of educational publications in EP disciplines							Minutes of the department,AMB, AB
7.	Conducting training seminars on teaching and learning methods (inter-university, intra-university, inter-departmental)							Seminar minutes
8.	Introduction of innovative technologies into the educational process							Plans and minutes of mutual visits, open classes, AMB minutes
9.	Analysis of Faculty Members classes of the department							Plans and minutes of mutual visits, open classes, AMB minutes
10.	Carrying out monitoring and periodic evaluation of EP based on analysis of educational plans, CED, IEP, regulatory educational and methodological documentation, minutes of department meetings, йuestioning results							Questionnaires of employers, students, audits of the Department of Academic Affairs
11.	Conducting a survey (questionnaire) of students to ensure satisfaction with educational services							Questioning students
12.	Conducting a questionnaire among employers to identify the needs of the labor market and							Questioning employers

	determine the professional competence of graduates								
13.	Conducting an internal examination of the EP								Conclusions of internal examination
14.	Conducting an external examination of the EP								Conclusions of external examination
15.	Analysis of the quality of EP in accordance with graduate employment indicators								Report on employment indicators, extracts from the State Center for Employment
Improving personnel potential of Faculty Members of EP
1.	Advanced training of Faculty Members (improving the language preparedness of Faculty Members, participation in English language courses, participation in Bolashak programs, obtaining a master's degree, doctorate, etc.)								Professional development plan, certificates, portfolios, academic degrees
Scientific research activity
1.	Publication activity of Faculty Members								Research report
2.	Participation in scientific projects								Research report
3.	Opening of department branches for scientific research								Order
4.	Actively involving students in various competitions and scientific circles								Decrees, copies of certificates and diplomas
5.	Conducting joint scientific research								Research report
6.	Participation in Republican subject Olympiads								Decrees, copies of certificates and diplomas
7.	Participation in the Republican Scientific Research Competition								Decrees, copies of certificates and diplomas
International cooperation
8.	Interdepartmental communication with universities near and far abroad								Agreements on cooperation

9.	Development of the external academic mobility program for Faculty Members and students							Orders certificates of work completion
10.	Invited foreign professors							Agreements
Educational work within the framework of the EP								
11.	Conducting events within the framework of Programs and Messages of the Head of State							Educational work report
Educational and methodological support and material and technical equipment								
12.	Providing relevant educational literature. Working with the electronic database of science and research library.							Approved educational and methodological provision map
13.	Development of educational and methodological literature by the Faculty Members of the department							Individual reports of Faculty Members, Department report
14.	Purchase of necessary, modern laboratory equipment							Applications, certificates of work completion

Considered at a meeting of the Educational and Methodological Board
Minutes No._____dated ____ _____, 20_____.

Considered at a meeting of the Academic Committee
Minutes No._____dated ____ _____, 20_____.