

APPROVED BY
Decision of the Board of
International University of
Information Technologies
Joint Stock Company
September 12, 2023
Minutes No.

DOCUMENTED PROCEDURE FOR THE TRAINING OF DOCTORS OF PHILOSOPHY (PhD)

QP-09

Revision 7

	Position	Surname and initials	Signature
Approved at the meeting of the Academic Board dated ____ __, 20__ Minutes No. ____ Developed by	Academic Secretary	Erkebekova E. K.	_____
	Vice-Rector for Research Affairs	Kolesnikova K.V.	_____
	Director of the Scientific Personnel Training Department	Kuratova A.K.	_____
Agreed by	Vice-Rector for Academic Affairs	Mustafina A.K.	_____
	Director of the Department of International Cooperation and Academic Mobility	Nalgozhina N. Zh	_____
	Director of Personnel and Documentation Management Department	Sungurova S. E.	_____
	Director of the Legal Department	Tynystanbekova A. Z.	_____
	QMS Expert	Kezhembaeva Zh. K.	_____

TABLE OF CONTENTS

1	GENERAL PROVISIONS.....	3
2	SCOPE	3
3	TERMS, NOTATIONS AND ABBREVIATIONS	4
4	GOALS AND OBJECTIVES	5
5	STRUCTURE AND CONTENT OF PHD DOCTORAL EDUCATIONAL PROGRAMS	6
6	REQUIREMENTS FOR THE CONTENT OF DOCTORAL EDUCATIONAL PROGRAMS	9
7	EDUCATIONAL ENVIRONMENT OF PHD DOCTORAL PROGRAMME	10
8	CONDITIONS OF IMPLEMENTATION AND STAFFING.....	11
9	DEVELOPMENT OF AN EDUCATIONAL PROGRAM FOR DOCTORAL STUDENTS TRAINING	12
10	REQUIREMENTS FOR THE LEVEL OF DOCTORAL STUDENT TRAINING.....	13
11	PROCEDURE FOR CERTIFICATION OF PHD DOCTORAL STUDENTS.....	14
12	FINAL CERTIFICATION.....	147
13	RIGHTS AND OBLIGATIONS OF DOCTORAL STUDENT.....	19
14	TIME STANDARDS FOR CALCULATING THE STUDY LOAD IN PHD DOCTORAL PROGRAMME	20
15	DISTRIBUTION OF FUNCTIONS FOR CONTROL AND COORDINATION OF DOCTORAL STUDENTS' EDUCATIONAL PROCESSES AT THE UNIVERSITY.....	21
	APPENDIX 1	23
	APPENDIX 2	24
	APPENDIX 3	25
	APPENDIX 4	34
	APPENDIX 5	35
	APPENDIX 6	36
	APPENDIX 7	41

1 GENERAL PROVISIONS

1.1 This Procedure establishes the procedure for training Doctors of Philosophy (PhD) at International University of Information Technologies JSC (hereinafter referred to as the University) and is developed in accordance with regulatory documents:

- Law of the Republic of Kazakhstan “On Education”;
- Law of the Republic of Kazakhstan “On Science”;
- State compulsory standard of higher and postgraduate education (Order of the Ministry of Science and Higher Education of the Republic of Kazakhstan dated 20.07.2022 No. 2);
- 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 dated 30.10.2018 No.595);
- Rules for awarding degrees (Order of the Ministry of Education and Science of the Republic of Kazakhstan dated 31.03.2011 No.127);
- Rules for organizing the educational process on credit technology of education in organizations of higher and (or) postgraduate education (Order of the Ministry of Education and Science of the Republic of Kazakhstan dated 20.04.2011 No.152);
- Model rules for admission to training in educational organizations implementing educational programs of higher and postgraduate education (Order of the Ministry of Education and Science of the Republic of Kazakhstan dated 31.10.2018 No.600);
- Qualification requirements for the educational activities of organizations providing higher and (or) postgraduate education, and a list of documents confirming compliance with them (Order of the Ministry of Education and Science of the Republic of Kazakhstan dated 17.06.2015 No.391);
- 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 dated 13.10.2018 No.569);
- Requirements for educational organizations for the provision of distance training and the rules for organizing the educational process for distance training and in the form of online training in educational programs of higher and (or) postgraduate education (Order of the Ministry of Education and Science of the Republic of Kazakhstan dated 20.03.2015 No.137);
- Model regulations on the dissertation council (Order of the Ministry of Education and Science of the Republic of Kazakhstan dated March 31, 2011 No. 126);
- Orders of the Chairman of the Board - Rector, decrees, regulations and other regulatory documents of the University.

1.2 This revision of the Procedure has been reissued in connection with changes and amendments to Decree of the President of the Republic of Kazakhstan dated 11.06.2022 No. 917 “On measures to further improve the public administration system of the Republic of Kazakhstan”; Acting order Minister of Science and Higher Education of the Republic of Kazakhstan dated 09.01.2023 No. 7 “On approval of the Rules for awarding degrees”; updated revision of the Order of the Minister of Science and Higher Education of the Republic of Kazakhstan dated 19.01.2023 No. 21 “On approval of state compulsory standards of higher and postgraduate education” (dated July 20, 2022 No. 2).

1.3 The procedure is an internal regulatory document of the University.

2 SCOPE

2.1 This Procedure determines the requirements and procedure for the implementation of educational programs of postgraduate education for the preparation of PhD doctors (PhD doctoral educational programs) at the University (the structure and content of doctoral educational programs, the admission procedure and rules for the preparation of PhD doctoral students, requirements for intermediate, final certification and the procedure for their implementation, rules for completing a scientific internship, organizing research/experimental research work for students in the PhD program.

2.2 This Procedure is a mandatory guide for officials and employees of structural divisions of the University involved in the process of training Doctors of Philosophy (PhD).

3 TERMS, NOTATIONS AND ABBREVIATIONS

3.1 The following terms are used in this Procedure:

Doctoral programme	– postgraduate education, educational programs of which are aimed at training personnel for scientific, pedagogical and (or) professional activities, with the award of the degree of Doctor of Philosophy (PhD) (doctor in the field) with the mandatory completion of at least 180 academic credits;
Doctoral student	– a person studying for a doctoral programme;
Doctor of Philosophy (PhD)	– a degree awarded to persons who have completed a doctoral program in a scientific and pedagogical direction or in a relevant field of professional activity and have defended a dissertation in the Republic of Kazakhstan or abroad, recognized in the manner established by the legislation of the Republic of Kazakhstan;
Dissertation	– qualifying scientific work defended in the Republic of Kazakhstan or abroad, in a specific specialty within the framework of an educational program for the preparation of a Doctor of Philosophy (PhD)
Doctoral dissertation	– scientific work of a doctoral student, which is an independent study in which theoretical principles have been developed, the totality of which can be qualified as a new scientific achievement, or a scientific problem has been solved, or scientifically based technical, economic or technological solutions have been outlined;
Credit	– a unified unit of measurement for the volume of academic work of a doctoral student; one credit is equal to 1 academic hour of classroom work by a doctoral student per week during the academic period (semester);
Credit education technology	– training based on students' choice and independent planning of the sequence of studying disciplines with the accumulation of academic credits;
Doctoral educational program	– general characteristics of the content of doctoral student training, expressed mainly through a list of disciplines and types of educational and research work, combined into appropriate cycles indicating their volume;
Individual educational plan (IEPI)	– the student's educational plan, independently formed by him for each academic year with the help of an adviser, based on the educational program and the catalogue of elective disciplines;
Individual work plan for a doctoral student (IPDS)	– a plan for the doctoral student's educational and research work is drawn up for the entire period of study under the guidance of scientific consultants.
Work educational plan (WEPI)	– an educational document developed by the university independently on the basis of the educational program;
Descriptors	– description of the level and scope of knowledge, abilities, skills and competencies acquired by students upon completion of studying the educational program of the appropriate level (stage) of higher and postgraduate education, based on educational outcomes, developed competencies and academic credits;

Competencies	– the ability to practically use the knowledge, skills and abilities acquired during the educational process in professional activities;
Academic period	– the period of theoretical training, established independently by the educational organization in one of three forms: semester, trimester, quarter;
Research Proposal	– a document prepared by a doctoral student and approved by the university during the first or second year of study, including the purpose, objectives and methodology of the study, literature review and expected results of the study.

3.2 The following abbreviations are used in the text of the Procedure:

SCES	State Compulsory Educational Standard of Postgraduate Education
MSHE RK	Ministry of Science and Higher Education of the Republic of Kazakhstan
EP	Educational program
OHPE	Organization of higher and (or) postgraduate education
FC	Faculty Members
DSRW	Doctoral Student Research Work
DSERW	Doctoral Student Experimental Research Work
List of publications	List of publications recommended by the Committee for Quality Assurance in the Sphere of Science and Higher Education of the Ministry of Science and Higher Education of the Republic of Kazakhstan for the publication of the main results of scientific activity (in accordance with the Rules for awarding degrees (Order of the Ministry of Education and Science of the Republic of Kazakhstan dated 31.03.2011 No.127))

4 GOALS AND OBJECTIVES

4.1 The goals of PhD educational programs are:

- creation, based on the integration of education and science, of an effective system for training scientific, scientific and pedagogical personnel of a new formation, capable of solving issues of improving society, the economy, production, science and the development of new technologies;
- harmonization of domestic technologies for training highly qualified scientific and pedagogical personnel with world standards, as well as proactive resolution of issues of their scientific, methodological, legal, financial, economic, personnel and logistical support;
- implementation of the educational process in accordance with the principles of international practice in the training of highly qualified scientific and pedagogical personnel, competitive in the modern labor market. . To this end, the student undergoes a course of theoretical training and carries out independent original scientific research, characterized by significant relevance and practical significance. The results of the research are presented in the form of a doctoral dissertation, which is defended in the prescribed manner.

4.2 The objectives of PhD doctoral educational programs are to prepare domestic doctors of philosophy who are competitive both within the country and in the international labor market, and to integrate national doctoral programs into the global educational space.

4.3 The educational program for the training of a Doctor of Philosophy (PhD) has a scientific and pedagogical orientation and involves fundamental educational, methodological and research training and in-depth study of disciplines in relevant areas of science for the system of higher and postgraduate education and the scientific field.

4.4 The formation of a contingent of doctoral students is carried out by placing a state order for the training of specialists from the Ministry of Science and Higher Education of the Republic of Kazakhstan.

4.5 Admission to doctoral programme is carried out in accordance with the Rules for admission to study in educational organizations implementing educational programs of higher education and postgraduate education.

4.6 Personnel training in PhD doctoral programme is carried out on the basis of master's degree educational programs in scientific, pedagogical and specialized areas with a training period of at least 3 years.

4.7 At the same time, at the "entrance", if the profile of the doctoral educational program coincides with the master's program, the educational outcome of the previous level of education is recognized automatically; in case of a discrepancy between the profile of the doctoral educational program and the master's program, the doctoral student is given prerequisites and deadlines for their mastery. The list of necessary prerequisites and the timing of their development are determined by the University. Prerequisites are acquired on a paid basis.

4.8 When a master of a specialized field enters a PhD doctoral programme, an educational program of postgraduate education in a pedagogical profile of a scientific and pedagogical master's program is additionally established as prerequisites.

5 STRUCTURE AND CONTENT OF PHD DOCTORAL EDUCATIONAL PROGRAMS

5.1 The implementation of the educational process in the postgraduate education system is carried out in accordance with the National Qualifications Framework, the Sectoral Qualifications Framework, occupational standards, Dublin descriptors and the European Qualifications Framework.

5.2 PhD educational programs are developed in scientific, pedagogical and specialized areas. Doctoral educational programs are developed in specific areas of training in accordance with the Classifier of areas of training for personnel with higher and postgraduate education on the basis of the State Compulsory Standard for Postgraduate Education, on the basis of which educational plans are developed (work educational plans, individual student educational plans) and work educational plans in disciplines (syllabuses).

5.3 Doctoral educational programs in terms of professional training are developed on the basis of studying the experience of foreign universities and research centers that implement accredited programs for training PhD doctoral students or doctors in the field.

5.4 The educational program for the training of a Doctor of Philosophy (PhD) has a scientific and pedagogical orientation and involves fundamental educational, methodological and research training and in-depth study of disciplines in relevant areas of science for the system of higher and postgraduate education and the scientific field.

5.5 The educational program for the training of a doctor in the field involves fundamental educational, methodological and research training and in-depth study of disciplines in relevant areas of science for sectors of the national economy, social sphere: education, medicine, law, art, economics, business administration and in the field of national security and military affairs.

5.6 The doctoral educational program contains educational and scientific/research components. Educational programs are developed according to the principle of modular training.

5.7 The content of the doctoral educational program consists of:

- 1) Theoretical training, including the study of cycles of basic and major disciplines;

- 2) Practical training of doctoral students: teaching and research practices, scientific or professional internships, including foreign ones;
- 3) Research work, including a doctoral dissertation;
- 4) Interim certification;
- 5) Final state certification, in the form of writing and defending a doctoral dissertation.

5.8 Theoretical training is 45 academic credits in the total volume of the doctoral educational program and consists of cycles of basic (hereinafter - BD) and major (hereinafter - PD) disciplines, which include disciplines of the university component (hereinafter - UC) and the elective component (hereinafter - EC). The list of disciplines of the university component and the elective component is determined by the graduating school. This takes into account the needs of the labor market, the expectations of employers, and the needs and interests of doctoral students. Discipline programs, as a rule, are interdisciplinary and multidisciplinary in nature, providing training at the intersection of a number of areas of knowledge.

5.9 The structure of the PhD doctoral educational program in the relevant areas is determined in accordance with Appendix 1 to this Procedure.

5.10 Planning of the content of education, the method of organizing and conducting the educational process is carried out on the basis of credit educational technology.

5.11 The doctoral educational program for students in the Doctor of Philosophy (PhD) program includes teaching and research scientific training; for students in a specialized doctoral program – practical training.

Teaching training in the system of postgraduate education is an important and integral component of educational programs of master's and doctoral studies in scientific and pedagogical directions, providing the opportunity to develop professional competencies in the course of teaching activities and is directly aimed at the formation and development of universal and general professional competencies of a teacher of an educational organization implementing higher and (or) postgraduate education. During the period of teaching training, doctoral students are involved in conducting classes in undergraduate and graduate courses.

The doctoral student's research scientific training is carried out with the aim of studying the latest theoretical, methodological and technological achievements of domestic and foreign science, as well as strengthening practical skills in the use of modern methods of scientific research, processing and interpretation of experimental data in dissertation research.

The doctoral student's practical training is carried out with the aim of consolidating the theoretical knowledge acquired during the educational process and improving the professional level.

5.12 The content of scientific and practical trainings is determined by the topic of the doctoral dissertation.

5.13 The completion of a doctoral dissertation is carried out during the period of DSRW (DSERW). The final result of the DSRW (DSERW) is a doctoral dissertation .

5.14 The final certification is 12 academic credits from the total volume of the doctoral educational program and is carried out in the form of writing and defending a doctoral dissertation.

5.15 The duration of mastering the doctoral educational program, depending on the profile and previous training, is at least 3 years.

5.16 Doctoral studies are carried out only on a full-time basis.

5.17 The academic year in doctoral studies consists of academic periods, incl. DSRW (DSERW), period of interim certification/final control, trainings (teaching, research scientific, practical), final certification and vacation. If necessary, to meet the needs of doctoral students, a summer semester of 6 weeks may be introduced. The duration of the intermediate assessment/final control is at least 2 weeks after each semester (if the educational process is organized on a semester basis). The duration of vacations in the academic year must be at least 5 weeks.

5.18 The scientific component of the doctoral educational program is formed from the DSRW (DSERW), scientific publications with the results of research, participation in republican and international scientific and practical conferences, writing and defending a doctoral dissertation.

5.19 The volume of scientific research (experimental research) work of a doctoral student is 123 academic credits in the total volume of the doctoral educational program.

5.20 As part of the DSRW (DSERW), the doctoral student's individual work plan for familiarization with innovative technologies and new types of production provides for mandatory internship in scientific organizations and (or) organizations in relevant industries or fields of activity, including abroad. The requirements and procedure for completing a scientific internship are regulated by the "Regulations on the organization of foreign scientific internships for PhD doctoral students" (R-119). The results of the internship are discussed at a scientific seminar of the graduating department.

5.21 Requirements for DSRW for a student in the Doctor of Philosophy (PhD) program:

- compliance with the main issues of the doctoral educational program on which the doctoral dissertation is being defended;
- is relevant and contains scientific novelty and practical significance;
- is based on modern theoretical, methodological and technological achievements of science and practice;
- is based on modern methods of data processing and interpretation using advanced information technologies;
- is carried out using modern scientific research methods;
- contains research (methodological, practical) sections on the main protected provisions.

5.22 Requirements for the DSERW of a student in the doctoral program:

- compliance with the main issues of the doctoral educational program on which the doctoral dissertation is being defended;
- is relevant and contains scientific novelty and practical significance;
- is based on modern achievements of science, technology and production and contains specific practical recommendations, independent solutions to management problems of a complex, cross-functional nature;
- is carried out using advanced information technologies;
- contains experimental and research (methodological, practical) sections on the main protected provisions.

5.23 The main criterion for the completion of the educational process in doctoral programme is that the doctoral student has completed at least 180 credits.

5.24 In cases of early completion of the doctoral educational program and successful defense of the dissertation, the doctoral student is awarded the degree of Doctor of Philosophy (PhD) or doctor in the field, regardless of the period of study.

5.25 A doctoral student who has completed the full course of theoretical training in the doctoral educational program, but has not completed the DSRW (DSERW) in full, is given the opportunity to re-acquire academic credits for the DSRW (DSERW) and defend his dissertation in subsequent years on a paid basis.

5.26 A doctoral student who has completed the full course of theoretical training in a doctoral educational program, who has completed DSRW (DSERW), but has not defended a doctoral dissertation, is awarded learning results and academic credits and is given the opportunity to defend a dissertation within two (2) years after graduation on a free basis, and in subsequent years on a paid basis in the amount of 12 academic credits.

5.27 After 3 years after graduation from doctoral studies, a PhD doctoral student is allowed to defend a doctoral dissertation only after re-approval of the Research Proposal on a paid basis.

5.28 The duration of doctoral studies is counted towards the length of scientific and pedagogical work.

5.29 In order to ensure academic mobility of students in postgraduate education programs, the opportunity to acquire credits in other educational (scientific) institutions or research organizations, including abroad, is provided.

5.30 Persons who have received a Doctor of Philosophy (PhD) degree, in order to deepen scientific knowledge, solve scientific and applied problems on a specialized topic, have the opportunity to enter a postdoctoral program or can conduct scientific research under the guidance of leading scientists of a selected educational and scientific organization or research organization.

6 REQUIREMENTS FOR THE CONTENT OF DOCTORAL EDUCATIONAL PROGRAMS

6.1 Doctoral educational programs are developed and approved by educational and scientific organizations independently in accordance with doctoral specialties in accordance with the Classifier of areas of training for personnel with higher and postgraduate education.

6.2 The doctoral educational program is developed on the basis of the SCES of the Republic of Kazakhstan and includes an educational plan, worked educational programs of disciplines (Syllabus) and educational and methodological complexes of disciplines, programs of professional (research, practical and/or scientific-teaching) trainings and an individual program of scientific and research work.

6.3 Doctoral educational programs contain:

- block of theoretical training, including basic, major and elective disciplines;
- block of scientific research work (DSRW or DSERW);
- teaching and research scientific training;
- interim certifications;
- final state certification, in the form of completing and defending a doctoral dissertation.

6.4 Theoretical training consists of a cycle of basic, major and elective components (elective disciplines).

The cycle of basic disciplines includes disciplines of a mandatory component and an elective component.

The cycle of major disciplines consists only of elective component disciplines.

The list of disciplines of the mandatory component is determined in accordance with the educational program for training a PhD doctoral student. The corresponding minimum volumes of credits in the disciplines of the mandatory component are determined by the state compulsory standards of postgraduate education of the doctoral educational program.

The list of elective disciplines and the corresponding minimum volumes of credits are established by the department independently in accordance with the requests of employers and the needs of the labor market.

6.5 The research part of the doctoral educational program must:

- be carried out within the framework of funded fundamental, applied and other state budgetary and contractual projects;
- include a scientific internship;
- be based on modern theoretical, methodological and technological achievements of domestic and foreign science and practice;

- contain theoretical (methodological, practical) sections consistent with the scientific provisions defended in the dissertation;
- include publication of the results of scientific research in well-known foreign scientific journals and domestic scientific publications included in the List of Publications. At the same time, publications must cover the main provisions submitted for defense;
- include doctoral student presentations at republican and international scientific conferences.

6.6 The results of the DSRW (DSERW) at the end of each semester are compiled by the PhD doctoral student in the form of a report and presented at the scientific seminar of the graduating department. Based on the results of defending the report, the department makes a decision on certification (not certification) of the PhD doctoral student and mastering (not mastering) the corresponding number of DSRW (DSERW) credits.

7 EDUCATIONAL ENVIRONMENT OF PHD DOCTORAL PROGRAMME

7.1 Doctoral educational programs (work and individual educational plan, programs of academic disciplines and practices, research programs) are developed by the graduating departments independently in accordance with the specialties of doctoral programme in accordance with the Classifier of areas of training at higher and postgraduate levels and are approved by the Chairman of the Board - Rector.

7.2 The content of the doctoral educational program is determined by the work educational plan, programs developed on the basis of regulatory documents of the Republic of Kazakhstan and standard educational plans and programs.

7.3 To supervise a doctoral dissertation, a doctoral student is assigned a scientific supervisor within two (2) months after enrollment.

7.4 Scientific supervision of doctoral students seeking the degree of Doctor of Philosophy (PhD) is carried out by consultants of at least 2 people, one of whom is a scientist from a foreign university.

7.5 Domestic and foreign consultants for PhD doctoral students are approved by order of the Chairman of the Board - Rector of the University based on the decision of the Academic Board of the university and submissions from graduating departments no later than two (2) months from the start of training.

7.6 During the first semester of study, a doctoral student, under the guidance of scientific consultants (domestic and foreign), draws up and approves an individual work plan, which includes:

- individual educational plan (IEPI);
- Research Proposal: the topic of the doctoral dissertation with justification and structure;
- plan for completing the doctoral dissertation (Appendix 2);
- individual DSRW (DSERW) plan (Appendix 2);
- plan for scientific publications and internships, including foreign ones (Appendix 2).
- training plan (program, training base, deadlines and reporting form, Appendix 2);

7.7 PhD doctoral student's scientific consultants evaluate the doctoral student's training at least twice a year and, if necessary, make adjustments to individual work plans. In this case, the information is brought to the attention of the graduating departments, the Scientific Personnel Training Department for training scientific personnel (hereinafter referred to as SPTD) and the Office Registrars department.

7.8 PhD doctoral student's scientific consultants are responsible for the doctoral student's performance of all types of work provided for in the individual work plan.

7.9 The doctoral student compiles the IEPI under the guidance of the adviser based on the WEPI and the catalogue of elective disciplines. It includes all disciplines of the mandatory component, the volume of which must be no less than that determined by the SCES.

7.10 The elective component disciplines are determined by the PhD doctoral student independently. The total number of credits of the elective component must be no less than that established by the SCES.

7.11 The content of the dissertation research should be aimed at the implementation of national priorities, government programs, fundamental or applied research programs.

7.12 The topic of the doctoral dissertation of a PhD doctoral student is formulated during the first semester of study and approved by order of the Chairman of the Board – the Rector based on the decision of the Academic Council of the University and submissions from graduating departments no later than the end of the first semester.

7.13 Topics of doctoral dissertations of PhD doctoral students must correspond to specialties and/or areas of scientific research within the framework of scientific work programs carried out by the University's scientific schools, graduating departments, and faculties.

7.14 Research Proposal includes the purpose and objectives of the research, object and subject, research methodology, relevance, expected results of the research (Appendix 2).

7.15 An individual DSRW plan is drawn up for the entire period of doctoral studies, broken down into semesters and years. The DSRW plan must indicate the topic of the dissertation research, its direction, the start and end dates of the stages, and the types of reporting. The individual DSRW plan is approved by both scientific consultants. If necessary, the individual DSRW plan can be refined.

7.16 The plan for scientific publications of a PhD doctoral student should contain the approximate topics of publications, the names of scientific publications (both domestic and foreign) in which the doctoral student plans to publish research results, and the timing of work on publications.

7.17 The doctoral student's scientific internship plan must include an internship (or internships) program indicating goals and objectives, names of scientific internship bases, dates and reporting forms.

7.18 In order to organize high-quality monitoring of the academic and scientific activities of doctoral students, an individual work plan is signed in three (3) copies, which are stored at the graduating department, in the SPTD and in the Office Registrars department (in the doctoral student's personal file).

7.19 Every semester, a PhD doctoral student undergoes certification for the implementation of an individual work plan. He provides a report on the results of the educational work and the DSRW (DSERW) carried out. The results are heard at a meeting of the graduating department in the presence of scientific consultants.

7.20 After completing a scientific internship, a PhD doctoral student provides a report on the results of a foreign internship at a university (scientific organization) of a foreign scientific supervisor. The report is heard at a meeting of the graduating department, a copy of the report is submitted to the SPTD.

7.21 The educational achievements of doctoral students are assessed using various forms of control and certification, determined by the Rules for ongoing monitoring of progress, intermediate and final certification of students in higher educational institutions and regulatory documents of the University.

7.22 To ensure recognition of the results of monitoring the educational achievements of doctoral students in the international educational space, knowledge assessment is carried out using a point-rating letter system.

7.23 Persons who have not completed the individual work plan and have not passed intermediate and final certifications within the established time limits are expelled from doctoral studies by order of the Chairman of the Board – the Rector.

8 CONDITIONS OF IMPLEMENTATION AND STAFFING

8.1 At the University, training in doctoral educational programs is conducted by doctors and candidates of sciences, doctors of philosophy (PhD), doctors in the field.

8.2 Foreign scientists with degrees of Doctor of Science, Doctor of Philosophy (PhD), Doctor of Specialization are invited to teach relevant educational programs.

8.3 Practitioners and doctors in the field are invited to conduct classes in specialized doctoral studies.

8.4 Scientific supervision of doctoral students seeking the degree of Doctor of Philosophy (PhD) is carried out by consultants of at least 2 people, one of whom is a scientist from a foreign university. Doctoral student's scientific advisers must have an academic degree (Candidate of Sciences, Doctor of Science, Doctor of Philosophy (PhD), Doctor of Science) or an academic degree of Doctor of Philosophy (PhD), Doctor of Science or Doctor of Philosophy (PhD), Doctor of Science and be specialists in Doctoral Research. The qualifications of scientific consultants must meet the approved requirements (Regulations on scientific consultants for PhD doctoral students). The domestic consultant is a full-time employee of the University (research organization), foreign - a leading scientist, staff member of a foreign university or research organization.

8.5 In special cases, supervision can be carried out by one scientific supervisor who has an academic degree of Doctor of Philosophy (PhD), a doctor in the field, who has work experience in a foreign higher educational institution and is actively working in this field.

8.6 Scientific consultants ensure the completion of the doctoral dissertation in compliance with the principles of independence, internal unity, scientific novelty, reliability, practical value and academic integrity, and are also responsible for the timely submission of the dissertation work for defense.

9 DEVELOPMENT OF AN EDUCATIONAL PROGRAM FOR DOCTORAL STUDENTS TRAINING

9.1 PhD educational programs are developed by graduating departments in areas of training in accordance with the Classifier of areas of training for personnel with higher and postgraduate education, with the requirements of SCES, reflecting educational outcomes, on the basis of which educational plans are developed (work educational plans, individual student educational plans) and work educational programs by disciplines (syllabuses).

9.2 Doctoral educational programs in terms of professional training are developed on the basis of studying the experience of foreign OHPEs and research centers that implement accredited training programs for PhDs or doctors in a specialized field.

9.3 Educational, methodological, bibliographic and information support of the educational process guarantees the possibility of high-quality mastery of the doctoral educational program by doctoral students.

9.4 The implementation of the educational program is ensured by free access to the world's information and library resources, funds and databases, computer technologies, teaching aids and developments in the disciplines and types of classes taught, including the completion of a doctoral dissertation.

9.5 Departments implementing doctoral educational programs have a material and technical base that ensures all types of theoretical and practical training provided for by the educational plan, and also provide workstations with a computer and Internet access for the effective completion of dissertation work.

9.6 The university provides an opportunity to publish research results, creates conditions for increasing the academic mobility of doctoral students and develops experimental educational doctoral programs, using advanced foreign experience in training scientific personnel in priority areas of science.

9.7 In order to develop practical skills in scientific and professional activities in a specific branch of science, a doctoral student undergoes an internship, which is implemented in accordance with an individual plan, within the time frame determined by the educational plan.

9.8 The training of doctoral students is carried out in accordance with the approved academic calendar to the extent established by the relevant SCES for educational programs.

10 REQUIREMENTS FOR THE LEVEL OF DOCTORAL STUDENT TRAINING

10.1 Requirements for the level of training of a doctoral student are determined on the basis of the Dublin descriptors of the third level of higher education (doctoral programme) and reflect the mastered competencies expressed in the achieved educational outcomes.

10.2 Educational outcomes are formulated both at the level of the entire doctoral educational program and at the level of individual modules or academic disciplines.

10.3 The third level descriptors within the Comprehensive Qualifications Framework of the European Higher Education Area (CQ-EHEA) reflect educational outcomes that characterize the student's abilities:

- demonstrate a systematic understanding of the field of study, mastery of the skills and research methods used in the field;
- demonstrate the ability to think, design, implement and adapt a substantial research process with a scientific approach;
- contribute with one's own original research to expanding the boundaries of the scientific field, which is worthy of publication at the national or international level;
- critically analyze, evaluate and synthesize new and complex ideas;
- communicate his knowledge and achievements to colleagues, the scientific community and the general public;
- promote, in academic and professional contexts, the technological, social or cultural development of society based on knowledge.

10.4 A doctoral graduate must:

- have fundamental scientific training;
- have the skills to use modern experimental methods;
- master modern information technologies, including methods of obtaining, processing and storing scientific information;
- be able to formulate and solve scientific and practical problems, organize and conduct research and innovation activities in the chosen scientific specialty;
- have a high level of knowledge of a foreign language.

10.5 Doctoral educational programs in specific specialties must reflect the requirements to:

- general education;
- social and personal competencies;
- economic, organizational and managerial competencies;
- professional competencies;
- special competencies;
- readiness to change social, economic, professional roles, geographic and social mobility in conditions of increasing dynamism of change and uncertainty;
- education in basic and elective discipline cycles.

11 PROCEDURE FOR CERTIFICATION OF PHD DOCTORAL STUDENTS

11.1 Certification is a form of control over the work of PhD doctoral students and is carried out in accordance with the SCES of the Republic of Kazakhstan.

11.2 The purpose of certification of PhD doctoral students is to monitor the implementation of the individual work plan of doctoral students and, if necessary, adjust it to achieve the main result - timely completion of doctoral programme and defense of the doctoral dissertation.

11.3 Certification objectives:

- monitoring the results of DSRW (DSERW), publication activity of doctoral students and ensuring a constant, uninterrupted process of writing a dissertation research;
- monitoring the results of completing the academic workload of doctoral students in accordance with the IEPI;
- coordination and control of the activities of the doctoral student and his scientific consultants;

11.4 Requirements for the content and procedure for certification apply to PhD doctoral students studying both on a state educational grant and on a paid basis.

11.5 Interim certification is carried out at the end of the 1st half of each academic year (after 1, 3 and 5 semesters).

11.6 When certifying a PhD, a doctoral student at a department meeting reports on the work done for the first half of the academic year, presents the results of all types of work provided for for this period in the IPD, and justifies the reasons for non-fulfillment of planned activities.

11.7 An interim report of PhD doctoral students on the work done for the 1st half of the academic year, certified by scientific supervisors and the head of the department, an extract from the minutes of the department meeting are submitted to the SPTD within five days after the department meeting. Reporting materials and a statement of grades are submitted by the person responsible for doctoral programme or the head of the department.

11.8 At the end of each academic year (depending on the start date of training), an annual certification of doctoral students is carried out on the basis of a point-rating system (based on Credit learning technologies) for assessing the results of their activities.

11.9 The results of the work of PhD doctoral students for the current period are documented in the form of a statement and protocol, which is certified by the scientific supervisor and the head of the department.

11.10 Certification is carried out on the basis of the PhD doctoral student's report on his implementation of the annual individual plan of educational and research work, scientific results obtained, works published or prepared for publication, participation in scientific and practical conferences, etc. taking into account the opinions of both scientific supervisors.

11.11 The results of certification of PhD doctoral students are reflected in an individual plan and certified by the scientific supervisor and the head of the department.

11.12 When certifying a PhD, a doctoral student at a department meeting reports on the work done, briefly presents the results of completing the types of work provided for for a given period in the IPDS, and substantiates the reasons for non-fulfillment of planned activities.

11.13 The following documents are submitted for certification:

- individual work plan for a PhD doctoral student;
- progress report, including DSRW (DSERW) (Appendix 5);
- list of scientific papers, reprints of publications and articles accepted for publication (with supporting documents);
- report on teaching training (based on the results of the first or second year of study).

11.14 Reporting materials of PhD doctoral students (final report on the work done for the academic year, individual work plan for the next academic year (if there is a change in the IPDS), a list of scientific papers and reprints for the current period, an extract from the minutes of the department meeting), certified by the supervisor and the head of the department, are submitted to the SPTD within five days after the department meeting. Reporting materials are submitted by the person responsible for doctoral programme.

11.15 Certification of doctoral students completing their studies is carried out taking into account the discussion of the dissertation work at an extended meeting of the department. Based on the results of the department meeting, an attendance sheet and an extract from the minutes of the department meeting are submitted to the SPTD. An extract from the minutes of the department meeting must contain information about the recommendation of the dissertation for defense or the need for its revision, indicating the deadlines.

11.16 The statement of certification of doctoral students is submitted to the Office Registrars department on the basis of the Minutes of the meeting of the department, certified by scientific supervisors and the head of the department after providing supporting documents: a list of scientific works and reprints of publications, dissertation materials in printed form, reports on DSRW, on the completion of teaching and research trainings, foreign internship, etc.

11.17 To carry out the research work of a doctoral student in the EP, 123 credits are allocated (Appendix 3), of which 45 credits are allocated for completing a doctoral dissertation, 14 credits for a foreign scientific internship, 44 credits for writing scientific publications, participation in international and republican conferences, 20 credits – defense of DSRW results at department meetings.

11.18 The results of the research work are presented by the doctoral student once a semester at a meeting of the graduating department and are presented in the form of a report. Based on the results of the meeting, the department makes a decision on certification (conditional certification, not certification) of the doctoral student and mastering (not mastering) the corresponding number of DSRW credits.

11.19 Certification of the results of a doctoral dissertation is carried out provided that the doctoral student prepares:

- during the 1st semester of study – Research Proposal, agreed upon with both scientific consultants and part of the literature review (75% of the first section) on the topic of the dissertation (3 credits);
- at the end of the 1st semester of study – defense of DSRW results at a department meeting (2 credits);
- during the 2nd semester of study – a completed literature review, collection of part of the initial data necessary to conduct research on the topic of the dissertation, demonstration of the finished first section of the dissertation (4 credits);
- during the 2nd semester of study – defense of DSRW results at a department meeting (2 credits);
- during the 3rd and 4th semesters of study - completing sections of the dissertation work devoted to collecting and analyzing data, developing models and methods, their verification, conducting experiments (natural or computer), etc. (10 credits for each semester respectively);
- during the 3rd and 4th semesters of study – defense of DSRW at a department meeting (4 credits each, respectively);
- during the 5th and 6th semesters of study - completing sections of the dissertation work devoted to the analysis and verification of the results obtained, computer implementation of the proposed models and methods, formulation of research results, preparation of the dissertation work, holding an extended scientific seminar at the department (10 and 8 credits per semester respectively);
- during the 5th and 6th semesters of study - defense of DSRW results at a department meeting (4 credits each, respectively).

11.20 The main scientific results of a dissertation for the degree of Doctor of Philosophy (PhD) are published before the defense of the dissertation in scientific publications included in the List of scientific publications recommended for publication of the main results of scientific activity by the Committee for Control in the Sphere of Education and Science of the Ministry of Science and Higher Education of the Republic of Kazakhstan (hereinafter referred to as the List), and (or) in international peer-reviewed scientific journals.

11.21 An international peer-reviewed scientific journal has an impact factor according to Journal Citation Reports (hereinafter referred to as JCR) and is indexed in the Web of Science Core Collection (hereinafter referred to as WoS) database (sections Arts and Humanities Citation Index, Science Citation Index Expanded, Social Sciences Citation Index company Clarivate Analytics or has a certain percentile according to CiteScore in the Scopus database.

11.22 Certification of the doctoral student's annual research results is carried out subject to certification of the semester results of the DSRW and publication by the doctoral student (Appendix 4):

- during the 1st year of study – at least two (2) publications in materials of international and republican conferences (4 credits);
- during the 2nd year of study - at least two (2) articles in scientific publications included in the List (8 credits), two (2) publications (in materials of international and republican conferences (4 credits) and at least two (2) publications (Conference paper or Proceedings) in international peer-reviewed scientific publications (in materials of international scientific and practical conferences) with a non-zero impact factor in the scientometric databases WoS or Scopus (12 credits);
- during the 3rd year of study - at least two (2) articles in scientific publications included in the List (8 credits) and at least one (1) publication (Article or Review) in international peer-reviewed scientific publications with impact factor according to JCR WoS data or percentile according to CiteScore in Scopus of at least 35 (8 credits).

11.23 It is not required to publish articles in scientific publications included in the List if the doctoral student has published:

- at least one (1) article in an international peer-reviewed scientific journal, indexed in the WoS database and included in the first two quartiles (Q1-Q2) according to the impact factor according to JCR or a percentile according to CiteScore of at least thirty five (35) in the Scopus database
- or at least two (2) articles or one (1) article and one (1) review in international peer-reviewed scientific journals indexed in the WoS database and included in the first three quartiles (Q1 - Q3) by impact factor according to JCR or having a percentile index according to CiteScore of at least thirty five (35) in the Scopus database;
- or a chapter in a monograph (the doctoral student owns at least three (3) printed sheets), which is published by trusted Elsevier, Brill, CRC Press, DeGruyter, Edward Elgar Publishing, John Wiley & Sons, McGraw Hill, Palgrave Macmillan, Peter Lang, Prentice Hall, Routledge, Sage Publications, Springer Nature, Taylor and Francis, Wolters Kluwer publishers, or from a university publisher in the top 100 US News Best Global Universities Rankings or Academic Ranking of World Universities or Times Higher Education World University.

In this case, the doctoral student has the right to be awarded 40 credits allocated for writing scientific publications (in international peer-reviewed scientific publications that have an impact factor in the WoS or Scopus scientometric databases and articles in scientific publications included in the List).

11.24 If a doctoral student publishes one (1) scientific article in a journal included in the first quartile (Q1) according to the impact factor according to JCR or having a CiteScore percentile of at least seventy-five (75), no other publications are required. A doctoral student has the right to be awarded 44 credits allocated for writing scientific publications and participating in international and national conferences.

11.25 When certifying doctoral students, not only published works are taken into account, but also works accepted for publication (subject to the presence of supporting documents).

11.26 Publications in international peer-reviewed scientific journals, conference proceedings must correspond to the content of the dissertation and the thematic focus of the journal and/or conference declared in the specified databases, published on the official website of the journal, in current issues and have the type of Article, Review or Article in Press, Conference Paper, Proceedings. It is allowed to publish research results in international peer-reviewed scientific journals with a multidisciplinary direction.

11.27 If the indexing of an international peer-reviewed scientific journal in the Scopus and/or WoS database is stopped due to violations, then the doctoral student's publications in this journal for the year in which indexing was stopped and for the previous year are not taken into account.

11.28 The quartile of a journal in the WoS database and (or) the percentile according to CiteScore in the Scopus database is taken into account for the year of publication or for the year preceding the year of publication.

11.29 For the scientific internship of PhD doctoral students at the educational institution of a foreign scientific supervisor, 14 DSRW credits are allocated. Foreign scientific internships for PhD doctoral students are planned, as a rule, in the second (2nd) or third (3rd) year, as well as during vacations. The total duration of the internship at the expense of the state order is at least thirty (30) calendar days and no more than three (3) months. One internship duration of three (3) months is allowed.

11.30 Internships are carried out in leading foreign scientific organizations and universities that occupy the first 1000 positions in international rankings or the first 200 positions in the relevant area (by Subject).

11.31 The acquisition of DSRW credits for completing a foreign scientific internship is confirmed by the decision of the graduating department, at a meeting of which the doctoral student's report on the results of the internship is heard and approved.

11.32 The department, after hearing the results of the doctoral student's work during the year, can make the following decisions:

- certify (work in accordance with the individual plan has been completed in full);
- certify conditionally (work is partially completed, re-certification of the doctoral student is assigned);
- do not certify (work not completed, completed insufficiently, PhD doctoral student cannot be transferred to the next semester or year of study).

11.33 If a decision is made on conditional certification, the doctoral student is given a deadline for re-certification, but no later than the middle of the next academic period.

11.34 If, during re-certification, the work of the individual plan is not completed (without a good reason), the doctoral student is not allowed to participate in subsequent certification and is subject to expulsion.

11.35 If the sum of points received by a doctoral student at the end of the year is below the minimum (threshold) value, the results of the certification are considered unsatisfactory (Appendix 6). Upon the recommendation of the department, by order of the vice-rector for academic and educational affairs, a period for re-certification may be set.

11.36 Doctoral students who do not pass re-certification are subject to expulsion.

11.37 At the end of each academic year, the Academic Board of the University, based on the presentation of the graduating department on the results of the doctoral students' work (fulfillment of the academic load and DSRW), makes a decision on certification (not certification) of the doctoral student, transferring him to the next year of study or submitting him for expulsion.

11.38 Doctoral students who are not certified based on the results of the semester report on the implementation of DSRW, are given the opportunity to master unmastered credits on a paid basis in the next academic period.

11.39 In the case of a long-term (more than 1 month) illness of a doctoral student and in the presence of supporting medical documents, the certification period may be postponed by order of the Vice-Rector for Academic Affairs.

11.40 Doctoral students who have not passed the annual certification without a good reason are expelled from PhD doctoral studies by order of the Chairman of the Board – the Rector.

12 FINAL CERTIFICATION

12.1 Final certification is a form of state control of the educational achievements of a doctoral student, aimed at determining the compliance of the knowledge, abilities, skills and competencies acquired by him with the requirements of the SCES for doctoral educational programs.

12.2 The purpose of the final certification is to assess the scientific-theoretical and research-analytical level of the doctoral student, developed professional and managerial competencies, readiness

to independently perform professional tasks and the compliance of his training with the requirements of the professional standard and the doctoral educational program.

12.3 The final certification is at least 12 academic credits in the total volume of the doctoral educational program and is carried out in the form of:

- dissertation work;
- a series of at least two articles and one review or three articles published in journals included in the first and/or second quartile (Q1 and/or Q2) of the JCR impact factor. In one of the articles, the doctoral student is the first or corresponding author. When fulfilling the requirements of this subclause, the requirements for presenting research results in publications do not apply to the doctoral student.

12.4 The doctoral dissertation is being checked to detect borrowing of text from other authors, which is carried out by the National Center for State Scientific and Technical Expertise.

12.5 Requirements for content, format, preliminary examination and the admission or non-admission of a dissertation work for defense are determined by regulations of the Ministry of Science and Higher Education of the Republic of Kazakhstan and the University, including the “Rules for the Award of Degrees”, “Model Regulations on the Dissertation Council”, “Dissertation Council Regulations” of IITU JSC.

12.6 The university independently sets requirements for the design of dissertation works, including the international citation styles used in dissertation works (Harvard style, APA (American Psychological Association) Style, MLA (Modern Language Association) Style), Chicago Style (Chicago Style), ACS (American Chemical Society) Style (ACS Style) or others depending on the area of training).

12.7 Based on the results of the defense, the University Dissertation Council holds a secret voting to make one of the following decisions:

- petition the Committee to award a doctoral student the degree of Doctor of Philosophy (PhD) or doctor in the field;
- send the dissertation for revision (only if the dissertation is defended in the form of a dissertation work);
- submit the dissertation for re-defense;
- refuse a request to the Committee to award a doctoral student the degree of Doctor of Philosophy (PhD) or doctor in the field.

12.8 Persons who have mastered the doctoral educational program and defended their doctoral dissertation, with a positive decision of the dissertation councils of the OHPEs with a special status or the Committee for Quality Assurance in the Field of Science and Higher Education of the Ministry of Science and Higher Education of the Republic of Kazakhstan, based on the results of the examination, are awarded the degree of Doctor of Philosophy (PhD) and a diploma is issued in accordance with the order of the Minister of Education and Science of the Republic of Kazakhstan dated March 31, 2011 No. 127 “On approval of the Rules for awarding degrees” and transcript.

12.9 A doctoral student, on whose dissertation it was decided that it is necessary to eliminate officially expressed comments, within three days after the defense of the dissertation, is issued a conclusion from the Dissertation Council with a detailed indication of the comments requiring elimination.

12.10 The revised dissertation must be submitted by the doctoral student to the Dissertation Council within three months from the date of defense of the dissertation.

12.11 Repeated defense of doctoral dissertations recommended as defended, but requiring the elimination of officially expressed comments with a repeated defense procedure, is carried out within a period of no later than twelve months from the date of the previous defense.

12.12 When re-defending a doctoral dissertation, the organization and activities of the Dissertation Council are provided at the expense of the applicant’s own funds.

12.13 Doctoral students whose dissertations were rejected by the Dissertation Council are considered to have failed to complete the individual plan and are subject to expulsion from doctoral programme by order of the Chairman of the Board – the Rector, without the right to repeat doctoral studies on the basis of a state educational grant.

13 RIGHTS AND OBLIGATIONS OF DOCTORAL STUDENTS

13.1 The doctoral student has rights and obligations in accordance with the Laws of the Republic of Kazakhstan “On Education”, “On Science”, regulatory legal acts of the Ministry of Science and Higher Education of the Republic of Kazakhstan, the Charter of the University, as well as other regulatory legal acts of the Republic of Kazakhstan.

13.2 The doctoral student is obliged to carry out all types of work provided for in the doctoral educational program in a timely and high-quality manner, and submit a completed doctoral dissertation within the deadlines specified in the doctoral student’s Individual Plan.

13.3 The doctoral student is obliged to:

- at the end of each stage of work provided for by the individual plan, provide all necessary written materials in a timely manner;
- keep a record of comments and feedback received from his academic consultants;
- comply with the established deadlines for submitting reports (on the educational and research/experimental work done, on outbound foreign internships, etc.);
- promptly inform the relevant administrative departments of the university about the change of name, residence address and contact information;
- discuss emerging problems with scientific consultants and advisers in a timely manner and take initiative in solving them;
- complete the writing of his doctoral dissertation in a timely manner.

13.4 Doctoral students enrolled for training under the state educational order as part of targeted training are required to timely conclude a tripartite contract for targeted training and comply with its terms.

13.5 A doctoral student has the right to contact the heads of graduating departments for assistance in finding scientific consultants and to resolve other organizational issues.

13.6 If conflicts arise between a doctoral student and a scientific consultant, the former has the right to contact the conciliation commission to resolve controversial issues. If necessary, the highest collegial body (the Academic Board of the University) may decide to remove the scientific consultant from management and appoint a new consultant.

13.7 A doctoral student, during doctoral studies, has the right to work, in his free time from study, for no more than 0.5 times the salary.

13.8 Doctoral students enrolled for training under the state educational order are required to comply with the terms of study in the manner established by the legislation of the Republic of Kazakhstan.

13.9 If there is a place of permanent employment that meets the conditions of work (in organizations of higher and (or) postgraduate education or scientific organizations), final-year doctoral students studying under the state educational order can, before the placement of graduates, present a certificate of employment to the Career Center and after distribution, receive a referral to continue working in the specified organization.

13.10 In the absence of a place of permanent employment or its non-compliance with the working conditions established by the legislation of the Republic of Kazakhstan, final year doctoral students are required to receive a referral from the Career Center for registration at the Employment Center at their place of registration.

13.11 A doctoral student may be expelled from doctoral programme:

- at his own request;
- for academic failure;

- for health reasons based on a certificate from a medical advisory commission (MAC);
- in connection with a transfer to another higher education institution;
- for failure to implement the individual plan;
- for loss of contact with the University;
- for financial debt for tuition fees;
- upon receiving an unsatisfactory grade during the final state certification;
- for violation of the legislation of the Republic of Kazakhstan, the Charter of the University, the terms of the agreement on the paid provision of educational services, the Internal Regulations, the Code of Academic Integrity.

13.12 Persons expelled from doctoral programme are issued an academic certificate indicating the credits completed.

13.13 All controversial issues arising in the process of preparing PhD doctoral students are resolved in the manner established by the legislation of the Republic of Kazakhstan.

13.14 Other rights and obligations of doctoral students not provided for by this Procedure are regulated by regulatory legal acts of the Republic of Kazakhstan.

14 TIME STANDARDS FOR CALCULATING THE STUDY LOAD IN PHD DOCTORAL PROGRAMME

14.1 The study load is measured by the time required for a doctoral student to study an academic discipline, module or entire doctoral educational program and necessary to achieve the established educational outcomes in the doctoral educational program.

14.2 The study load includes all educational activities of the doctoral student - lectures, seminars, group classes, group exercises, practical and laboratory work, studio classes, teaching practice, foreign scientific internship, research work (experimental research work), writing and defense of a doctoral dissertation, independent work, including under the guidance of scientific consultants.

14.3 The doctoral student is trained on the basis of an individual work plan, which is drawn up under the guidance of scientific consultants.

14.4 When determining a doctoral student's study load, it is assumed that the academic year consists of academic periods, the forms of which (semester - 15 weeks, trimester - 10 weeks, quarter - 7-8 weeks) are determined by the University, the period of final certification (at the graduation course).

14.5 The full study load of one academic year corresponds to 60 academic credits and corresponds to 1800 academic hours for one academic year. Moreover, during one semester, a doctoral student masters 30 academic credits.

14.6 One academic credit corresponds to 30 academic hours.

14.7 The main criterion for the completion of the educational process for the training of Doctors of Philosophy (PhD) (doctors in the field) is the completion of at least 180 academic credits by the doctoral student, including all types of educational and scientific activities.

14.8 In case of early completion of the doctoral educational program and successful defense of the dissertation, the doctoral student is awarded the degree of Doctor of Philosophy (PhD) or doctor in the field, regardless of the period of study.

14.9 Norms of study load in doctoral programme are determined in accordance with the "Regulations on planning academic work and study load of faculty members" of the University (P-01).

14.10 The entire scope of the doctoral student's independent work must be confirmed by assignments that require the doctoral student to work independently on a daily basis.

14.11 Time standards for calculating the study load are provided for in the "Regulations on planning academic work and study load of faculty members" (P-01).

15 DISTRIBUTION OF FUNCTIONS FOR CONTROL AND COORDINATION OF DOCTORAL STUDENTS' EDUCATIONAL PROCESSES AT THE UNIVERSITY

15.1 The development and implementation of doctoral educational programs is carried out by the graduating department, which is responsible for the compliance of the educational process with the State Compulsory Standard for Postgraduate Education and the qualification requirements for the organization of educational activities.

15.2 For each area of training, the graduating department develops a competency model of a doctoral graduate (doctor).

15.3 The graduating department implementing doctoral educational programs must provide:

- conducting training sessions by teachers with the degree of Candidate of Sciences, or Doctor of Sciences, or Doctor of Philosophy (PhD), or a doctor in the field and/or the academic title of “associate professor (assistant professor)” or “professor”;
- the presence of existing agreements on scientific exchange with accredited foreign higher education institutions (confirmed by a copy of the certificate of accreditation of the relevant educational programs of the foreign university), providing for standards for the status of a partner university in the relevant area of training, attracting foreign consultants and implementing joint scientific projects;
- the presence of existing agreements with organizations designated as bases of practice, and agreements for foreign internships in accordance with the field of personnel training;
- the presence of accredited laboratories or existing contracts with such laboratories (in the field of “Information and communication technologies”);
- the presence of agreements with foreign scientists on the relevant educational program;
- carrying out funded research and development work with organizations and enterprises.

15.4 The graduating departments supervise all types of educational work of doctoral students and their performance of all types of research work:

- submit a proposal for the appointment of scientific consultants, consolidation of dissertation research topics, conclusion of agreements with foreign supervisors;
- draw up schedules of scientific seminars for certification of doctoral students in DSRW, conduct scientific seminars;
- monitor the implementation of individual plans of doctoral students;
- carry out monitoring and analysis of the work of scientific consultants;
- submit a proposal for the appointment of heads of all types of practices provided for in the doctoral educational program, assigning PhD doctoral students to training supervisors;
- carry out monitoring and analysis of the work of training supervisors, the flow and quality of trainings;
- submit a proposal for the organization of foreign scientific internships for doctoral students.

15.5 Coordination and control of doctoral students' activities by the Office Registrars department includes:

- monitoring of the theoretical component of the educational program;
- control of the schedule, attendance of classes and fulfillment of the study load by doctoral students;
- organization of intermediate and final certifications of doctoral students (the theoretical part of the educational program), control of the procedure for conducting them, analysis of the results of interim and final certifications;

- formation of personal files of doctoral students, reception, storage, issuance and return of personal files of students;
- formation of orders on approval of topics of doctoral dissertations and assignment of scientific consultants based on submissions from graduating departments and decisions of the Academic Board of the University;
- recording the contingent of doctoral students, its movement, preparing statistical reports on the contingent of doctoral students;
- preparation and approval of orders for the movement of students in the doctoral program;
- recording, preparation and issuance of transcripts and Doctor of Philosophy (PhD) diplomas to persons who have completed the doctoral educational program and defended their dissertation, with a positive decision of the Dissertation Council and the Committee for Quality Assurance in Science and Higher Education of the Ministry of Science and Higher Education of the Republic of Kazakhstan.

15.6 Coordination and control of doctoral students' activities by SPTD includes:

- monitoring the research component of the educational program;
- examination of the compliance of appointed scientific consultants and topics of doctoral dissertations with qualification requirements;
- control of the process of forming orders on approving the topics of doctoral dissertations and assigning scientific consultants based on submissions from graduating departments and submitting them to the Academic Board of the University;
- formation of orders on scientific internships for doctoral students, based on submissions from graduating departments and applications from doctoral students;
- control of interim and final certifications of DSRW (DSERW), analysis of interim and final certifications of DSRW (DSERW);
- consulting doctoral students on the procedure for an extended meeting of the department and defending a dissertation at the University Dissertation Council.

Table 1.1–Structure of the doctoral education program (PhD)

S No.	Name of cycles of disciplines and activities	Total labor intensity	
		in academic hours	in academic credits
1.	Theoretical training	1,350	45
1.1	Cycle of basic disciplines (BD) 1) Academic writing 2) Scientific research methods		
1)	University component and (or) elective component		
2)	Teaching training	Not less than 300	Not less than 10
1.2	Cycle of major disciplines (MD)		
1)	University component and (or) elective component		
2)	Research scientific training	Not less than 300	Not less than 10
2	Doctoral student research work (DSRW)	3,690	123
1)	Doctoral student research work, including internship and completion of a doctoral dissertation		
3	Additional types of training (ATT)		
4	Final certification (FC)	360	12
1)	Writing and defending a doctoral dissertation	360	12
	Total	Not less than 5400	Not less than 180

Recommendations for writing a Research Proposal

The proposal for the doctoral dissertation is a document on the basis of which the graduating department makes a decision on approving the topic of the PhD dissertation of the doctoral student.

In the proposal of the dissertation work, it is necessary to formulate the relevance of the chosen topic, its compliance with the scientific direction of the department, the goals and objectives of the work, the object and subject of research, tools for conducting scientific research (research methods), the scientific and practical value of the work, and describe the planned results of the work.

The content of the dissertation research should be aimed at the implementation of national priorities, government programs, fundamental or applied research programs.

The first step in writing a proposal is to formulate the topic of the dissertation. At this stage, the topic of the dissertation is not final; it may change in the process of training and/or research. The topic of the dissertation must correspond to the directions of the University's scientific schools and the topics of research work of the graduating departments (faculties). The topic of the dissertation research should reflect the scientific problem being solved, its novelty, as well as the object and subject.

When choosing a topic for a PhD doctoral student's dissertation, it is advisable to take a narrow technical problem for its in-depth and detailed analysis. The topic of the dissertation must be related to new promising areas of modern science and technology, for example, the development of new research methods, principles of machine design, technological techniques in relation to a specific field of application, field of knowledge or technology. The dissertation may be devoted to a more detailed study of a known phenomenon or process using new scientific research methods and obtaining new scientific results.

The formulation of the dissertation topic should indicate the research problem and the proposed method/boundaries of its solution within the framework of any scientific project. The formulation should include keywords reflecting the content of the work, be clear in form and specific, and may consist of two parts, indicating, respectively, the problem and the method of solving it. In the formulation of the dissertation topic, it is necessary to indicate:

- focus of research (increasing efficiency, improving structure, optimization, reducing costs, etc.);
- object of research (organization, method, phenomenon, process, area of knowledge, etc.);
- subject of research (mode of action, tool, model, research method, methodology, concept of study or construction).

Examples of wording of dissertation topics:

1. Models and methods for digitalization of dispatch processes in the virtual economy of the Republic of Kazakhstan.
2. Models and methods of multi-agent distribution of labor resources for IT projects under conditions of uncertainty.
3. Information technology for modeling and analysis of tourism demand based on a cognitive-statistical approach.
4. Information technology for assessing the results of scientific activity based on design-vector models.

The next stage is to substantiate the relevance of the scientific research being carried out. At this point, it is necessary to show the relevance of the scientific problem being solved not only in practical terms, but also the need to carry out scientific developments in the field formulated in the research topic. For this purpose, scientific research works over the past 5 years on similar topics are reviewed and the problems solved in these works are briefly characterized. Based on the analysis of scientific works,

issues that need to be considered in more detail are identified. **Justification of relevance should concern only the topic of research**, and not describe the entire range of issues of the scientific field.

The next step in substantiating a dissertation is to formulate the purpose of the scientific work and research objectives. **The purpose and objectives of the research must be based on relevance. The formulation of the goal should answer the question: how will the solution to the problem formulated in the dissertation be achieved.** That is, the purpose of the work clarifies the topic of the dissertation. The purpose of the work can be divided into 3-5 main issues of a scientific and practical nature, the solution of which will allow achieving the goal. These questions are the objectives of scientific research.

As part of the dissertation research, the doctoral student must select a specific research object and formulate the subject of the research. **The object and subject of research** as categories of the scientific process **are related to each other as general and particular**. The object of research is always wider than its subject. **An object is an area of activity or a problem situation that exists independently of the researcher. The subject is the process being studied within the object of study. The part of an object that serves as the subject of research is identified.**

An obligatory section in the proposal of the dissertation research is the presentation of its methodological basis, i.e. a set of methods of scientific knowledge that the doctoral student plans to use to achieve the goal of the dissertation research. Depending on the nature and degree of complexity of the problems being solved, theoretical or empirical research methods may predominate in the work. The ability of a doctoral student to correctly choose research methods determines the reliability of further results of the dissertation work.

At the next stage, the doctoral student describes the expected scientific results of the study. This description must reflect the novelty or elements of scientific novelty of the applicant's work, for which an academic degree is awarded. Elements of scientific novelty must be related to the purpose and objectives of the dissertation. Scientific novelty is usually defined by the concept "for the first time."

This section also indicates the expected practical results, describes the possibility of using the results of dissertation research in the real practical activities of enterprises and institutions, and what applied problems this research can solve.

The expected results of the research indicate its purpose - the knowledge that is expected to be produced as a result of the research and set the criteria by which the success of the DSRW will be assessed.

In conclusion, the proposal for the topic of the dissertation indicates the existing scientific background for the work, which can be a master's thesis, a thesis on a similar topic, an introductory abstract, publications, speeches at conferences, work in projects on similar topics and other achievements of the doctoral student.

APPROVED BY
Vice-Rector for Research Activities
International University of
Information Technologies JSC
_____, Kolesnikova K.V.
_____, 20__.

DOCTORAL STUDENT INDIVIDUAL WORK PLAN

(Full name of doctoral student)

Educational program:

(code, name)

Field of training:

Department:

Period of doctoral studies:

from _____, 20__ to _____, 20__

Domestic scientific consultant:

(Full name, academic degree, position)

Foreign scientific consultant:

(Full name, academic degree, position)

Topic of doctoral dissertation:

Deadline for submission of doctoral
dissertation

Almaty, 20__

1. DOCTORAL STUDENT INDIVIDUAL EDUCATIONAL PLAN (Sample filling)

No.	Name of discipline and activities	Semester	Total number of credits	Including classroom hours	DSIW hours	Form of control
1	2	3	4	5	6	7
BASIC DISCIPLINES (BD) – 20 credits						
1	Academic writing	1	5	60	90	Exam
2	Research methods	1	5	60	90	Exam
3	Teaching training	3	10	90	210	Report
MAJOR DISCIPLINES (MD) – 25 credits						
4	Elective component (EC)	1	5	60	90	Exam
5	Elective component (EC)	1	5	60	90	Exam
6	Elective component (EC)	1	5	60	90	Exam
7	Research scientific training	2	10	90	210	Report
RESEARCH WORK – 123 credits						
8	Doctoral student research work, including internship and completion of a doctoral dissertation (DSRW)	1-6	123	1107	2583	Report
FINAL CERTIFICATION (FC) – 12 credits						
9	Writing and defending a doctoral dissertation	6	12	60	300	Defense
	TOTAL		180	1620	3780	

Director of SPTD _____,20__.
Surname, initials Signature

Head of department _____,20__.
Surname, initials Signature

Doctoral student _____,20__.
Surname, initials Signature

2. DOCTORAL STUDENT RESEARCH WORK (DSRW)

2.1 Topic of doctoral dissertation

2.2 Relevance of the research

No.	Type of work	Deadlines	Reporting form	Completion note
1st semester, 20__/20__ academic year, 5 credits				
2nd semester, 20__/20__ academic year, 10 credits				
3rd semester, 20__/20__ academic year, 30 credits				
4th semester, 20__/20__ academic year, 30 credits				
5th semester, 20__/20__ academic year, 30 credits				
6th semester, 20__/20__ academic year, 18 credits				

3. TEACHING TRAINING

3.1 Place of training _____

3.2 Period of training _____

3.3. Purpose of training _____

3.4 Objectives of training _____

3.5 Work plan:

Methodical work

Pedagogical work

Educational work

3.6 Teaching training program

No.	Type of work	Deadlines	Reporting form	Completion note

...

** Based on the results of teaching training, the doctoral student must submit a written report for defense within the established time frame.*

4. RESEARCH SCIENTIFIC TRAINING

No.	Type of work	Deadlines	Reporting form	Completion note

...

** Based on the results of research scientific training, the doctoral student must submit a written report for defense within the established time frame.*

QP-09, I-07, 12.09.2023

Topic of doctoral dissertation

Relevance of research

Scientific novelty

Purpose and main objectives of the research

Object and subject of research

Research methods

Theoretical and practical significance

Expected results

Domestic
scientific consultant _____, 20__.
Surname, initials Signature

Foreign
scientific consultant _____, 20__.
Surname, initials Signature

Doctoral student _____, 20__.
Surname, initials Signature

The topic of the dissertation was approved at a meeting of the Academic Board of the Almaty Management University, minutes No. _____ dated _____.

6. DOCTORAL DISSERTATION PLAN

No.	Content of work	Deadlines	Completion note (signature of the scientific consultant)
1.	Processing and formation of scientific and methodological literature	1st-2nd semester	
2.	Preparation of dissertation sections: Introduction. Chapter 1. _____ _____ _____ Chapter 2. _____ _____ _____ Chapter 3. _____ _____ _____ Conclusion		
3.	Collection and analysis of data, results, development of models and methods, their verification, conducting experiments, publishing articles	3rd-4th semester	
4.	Carrying out sections of the dissertation work devoted to the analysis and verification of the results obtained, computer implementation of the proposed models and methods, formulation of research results, preparation of a report, demonstration material	5th-6th semester	
5.	Preparation of dissertation work, presentation of work for preliminary defense		
6.	Defense of the dissertation		

Note: a doctoral student is allowed to defend himself based on the results of completing an individual plan and completing all sections.

Domestic
scientific consultant _____, 20__.
Surname, initials Signature

Foreign
scientific consultant _____, 20__.
Surname, initials Signature

Doctoral student _____, 20__.
Surname, initials Signature

7. SCIENTIFIC PUBLICATION PLAN

7.1 Carrying out research work, preparing scientific articles and reports, participating in conferences, seminars and other types of work *

No.	Publication title	Publication type (abstract, article, scientific review, etc.)	Publication dates (month year)	Publication (name of journal, conference)	Completion note
1.					
2.					
3.					

* Publication of articles and participation in conferences are confirmed by copies of articles and conference programs

7.2 Scientific internship

No.	Place of internship	Deadlines	Reporting form	Completion note
1.				
2.				
3.				

Internship program

No.	Types of work	Number of hours
1.		
2.		
3.		

Adviser _____, 20__.
Surname, initials Signature

Domestic
scientific consultant _____, 20__.
Surname, initials Signature

Foreign
scientific consultant _____, 20__.
Surname, initials Signature

Doctoral student _____, 20__.
Surname, initials Signature

Agreed by:

Head of the department _____, 20__.
Surname, initials Signature

Director of SPTD _____, 20__.
Surname, initials Signature

Table 3.1– Distribution of DSRW (DSERW) credits by semester and activities

S No.	Name of activity	Semesters						
		1	2	3	4	5	6	TOTAL
1	Execution of DSRW	3	4	10	10	10	8	45
2	Publication of abstracts in materials of international and/or national conferences		4	2	2			8
3	Publication of articles in scientific publications included in the List			4	4	4	4	16
4	Publications (articles, reviews or conference proceedings) in international peer-reviewed scientific publications that have an impact factor in the WoS or Scopus International Database			6	6	8		20
5	Defense of DSRW at a department meeting	2	2	4	4	4	4	20
6	Foreign scientific internship			4	4	4	2	14
	TOTAL	5	10	30	30	30	18	123

Table 4.1– Distribution of credits based on the results of doctoral students' publication activity for the annual certification for DSRW

Academic year	Type of activity and credits allocated for it						TOTAL credits
	Conferences (republican, international)	Credits	Articles in publications from the List	Credits	Publications in WoS/Scopus	Credits	
1	2	4	-	-	-	-	4
2	2	4	2	8	2 (Conference paper or Proceedings)	12	24
3	-	-	2	8	1 (Article or Review)	8	16
TOTAL	4	8	4	16	3	20	44



APPROVED BY
Head of department

International University of
Information Technologies JSC
_____(Full name)
_____, 20__.

Doctoral Student Research Work REPORT

PhD Doctoral Student _____
Full name

Educational program _____

Year of study _____ Semester _____

Domestic scientific consultant _____
Full name, position, academic title and degree

Foreign scientific consultant _____
Full name, position, academic title and degree

Topic of doctoral dissertation _____

Heard at a meeting of the department _____
(name of the department)

minutes No. _____ dated _____, 20__.

Grade _____

PhD Doctoral Student _____
(signature) (print full name)

Scientific consultant _____
(signature) (print full name)

Foreign scientific consultant _____
(signature) (print full name)

Director of SPTD _____
(signature) (print full name)

Almaty, 20__

1. RESEARCH WORK RESULTS

Topic of doctoral dissertation

Relevance of the research

Scientific novelty

Purpose and main objectives of the research

Object and subject of research

Research methods

Theoretical and practical significance

Expected results

List of references used

2. DOCTORAL DISSERTATION PLAN

No.	Content of work	Deadlines	Completion note (signature of the scientific consultant)
1.	Processing and formation of scientific and methodological literature	1st-2nd semester	
2.	Preparation of dissertation sections: Introduction. Chapter 1. _____ _____ _____ Chapter 2. _____ _____ _____ Chapter 3. _____ _____ _____ Conclusion		
3.	Collection and analysis of data, results, development of models and methods, their verification, conducting experiments, publishing articles	3rd-4th semester	
4.	Carrying out sections of the dissertation work devoted to the analysis and verification of the results obtained, computer implementation of the proposed models and methods, formulation of research results, preparation of a report, demonstration material	5th-6th semester	
5.	Preparation of dissertation work, presentation of work for preliminary defense		
6.	Defense of the dissertation		

3. LIST OF SCIENTIFIC PAPERS*

S No.	Name of work, its type	Form of work	Output	Volume in printed sheets	Co-authors
1	2	3	4	5	6
<i>In publications included in the Committee's list</i>					
1.		Printed/Electronic	Bulletin of KazNU. – 2023. – Volume 67, issue 1. – pp.153-163 http://ijmph.kaznu.kz		
<i>In international peer-reviewed scientific journals included in Web of Science or Scopus databases</i>					

1.		Printed/El ectronic			
<i>In materials of international and foreign conferences</i>					
1.		Printed/El ectronic			

**Starting from the moment of admission to doctoral programme (publication of articles, participation in conferences are confirmed by copies of articles and conference programs), preparing publications, obtaining grants, participating in scientific work competitions, internships, etc.*

Sample report structure

1. Content
2. The topic of the dissertation research, the relevance and practical significance of the problem; essence, methodology and main results of the doctoral student's research work during the certification period.
3. List, characteristics, content of work completed during the study period:
 - educational work: what courses were completed (indicate the discipline, name of the course, results);
 - scientific work: description of the experiments and researches carried out, the main results of the research work, generalization and evaluation of the results obtained, their comparison with data from similar researches.
 - participation in scientific seminars, conferences, publications;
 - additional types of work.
4. Conclusion (indicate which works have been completed in accordance with the IPDS, which have not, indicate the reasons for non-fulfillment of the planned work)
5. List of references (drawn up in accordance with the established requirements for scientific works)
6. Attachments: additional documents (copies of certificates, certifications, references, reprints of articles)

The volume of the report should not exceed 20 pages of typewritten text (excluding appendices). Each section of the report should begin on a new page, the text should contain references to sources, and graphic elements (pictures, diagrams and graphs) and tables can be used as necessary. All illustrations, tables and appendices must be referenced in the text of the report.

The appendices are a continuation of the report. Appendices are arranged in the order of references to them in the text. Each appendix begins on a new page with the Appendix word and its designation at the top in the middle. Appendices must have continuous pagination.

Approximate criteria for assessing the activities of PhD doctoral students

Table 7.1– Interim and final certification of DSRW at a scientific seminar of the graduating department (CR1)

Grade (letter system)	Criteria
A (95-100)	High level of academic performance
A- (90-94)	<p>The doctoral student fully completed the IPDS during the reporting period.</p> <p>The doctoral student provided a research work report, defended the research results at the department's scientific seminar, answered all questions, and did not receive any significant comments.</p> <p>The doctoral student's answers confirm the high level of independence of the research being carried out, knowledge of professional terms, the speech is clearly structured, the presentation reflects the work performed, etc.</p> <p>The doctoral student demonstrates good public discussion skills and the ability to argueably defend put forward scientific positions and hypotheses.</p> <p>The doctoral student has completed the plan for scientific publications (for doctoral students of 2-6 semesters).</p>
B+ (85-89)	Academic performance is good with minimal errors
B (80-84)	<p>The doctoral student completed the IPDS for the reporting period with minor deviations or not completely (for objective reasons). However, this does not affect the timeliness and completeness of solving the research objectives.</p> <p>The doctoral student provided a research work report, defended the research results at the department's scientific seminar, did not answer all the questions, and received a number of insignificant comments.</p> <p>The doctoral student demonstrates an insufficient level of proficiency in professional terms; the logical connections and sequence of presentation of research results are broken in the presentation and speech.</p> <p>The doctoral student demonstrates some skills in public discussion, the arguments are not clear, and he weakly defends the scientific positions and hypotheses put forward.</p> <p>The doctoral student did not fully fulfill the plan for scientific publications (for doctoral students of 2-6 semesters). However, this does not greatly affect the timeliness and completeness of the publication of scientific research results.</p>
B- (75-79)	
C+ (70-74)	
C (65-69)	
C- (60-64)	Academic performance is satisfactory with a number of noticeable errors
D+ (55-59)	<p>The doctoral student completed the individual educational plan for the reporting period with significant deviations (for objective reasons). The ability to complete IPDS on time remains possible, but requires significant effort</p> <p>The doctoral student provided a research work report, defended the research results at the department's scientific seminar, receiving comments on the structure of the research and presentation of the material.</p> <p>The doctoral student does not fully master the research materials, did not fully answer the questions, the argumentation is weak, and does not know how to defend the scientific positions and hypotheses put forward.</p> <p>The doctoral student did not fully fulfill the plan for scientific publications (for doctoral students of 2-6 semesters).</p> <p>The ability to complete the publication plan on time remains possible, but requires significant effort</p>
D (50-54)	

FX (25-49)	<p>Academic performance is not satisfactory</p> <p>The doctoral student did not complete the IPDS for the reporting period / completed with significant deviations (without explanation).</p> <p>The doctoral student did not provide a research work report / did not provide a complete report; did not speak at the department's scientific seminar / spoke at the department's meeting, receiving many significant comments.</p> <p>The doctoral student does not know the research materials, did not answer questions, and there is no argumentation. The presentation lacks logic in the presentation of materials.</p> <p>The doctoral student did not fulfill the plan for scientific publications (for doctoral students of 2-6 semesters).</p>
------------	---

Table 7.2 – Approximate criteria for assessing the publication activity of PhD doctoral students (CR2)

Grade (letter system)	Criteria
1st year of study	
A (95-100)	The doctoral student took part in two (2) international scientific and practical conferences, with subsequent publication of reports (proceedings) in a collection (in accordance with the publication plan)
A- (90-95)	<p>The doctoral student took part in one (1) international scientific and practical conference, with subsequent publication of reports (proceedings) in a collection (in accordance with the publication plan)</p> <p>The doctoral student took part in the national scientific and practical conference, with subsequent publication of reports (proceedings) in a collection (in accordance with the publication plan)</p>
B+ (85-89)	The doctoral student took part in two (2) national scientific and practical conferences, with subsequent publication of reports (proceedings) in a collection (in accordance with the publication plan)
B- (75-79)	The doctoral student took part in one (1) national scientific and practical conference, with subsequent publication of reports (proceedings) in a collection (in accordance with the publication plan)
F (0-24)	The doctoral student did not participate in international and national conferences
2nd year of study	
A (95-100)	<ul style="list-style-type: none"> – The doctoral student published 2 articles in a journal included in the List – The doctoral student took part in two (2) international scientific and practical conferences, the materials of which are indexed in the WoS/Scopus International Database (in accordance with the publication plan) – The doctoral student took part in two (2) international scientific and practical conferences, with subsequent publication of reports (proceedings) in a collection (in accordance with the publication plan)
A- (90-94)	<ul style="list-style-type: none"> – The doctoral student published 2 articles in a journal included in the List – The doctoral student took part in one (1) international scientific and practical conferences, the materials of which are indexed in the WoS/Scopus International Database (in accordance with the publication plan) – The doctoral student took part in two (2) international scientific and practical conferences, with subsequent publication of reports (proceedings) in a collection (in accordance with the publication plan) – The doctoral student took part in one (1) national scientific and practical conference, with subsequent publication of reports (proceedings) in a collection (in accordance with the publication plan)
B+ (85-89)	– The doctoral student published 1 article in a journal included in the List; provided a certificate of acceptance of publication (accepted) in a journal included in the list

	<ul style="list-style-type: none"> – The doctoral student took part in one (1) international scientific and practical conferences, the materials of which are indexed in the WoS/Scopus International Database (in accordance with the publication plan) – The doctoral student took part in one (1) international scientific and practical conference, with subsequent publication of reports (proceedings) in a collection (in accordance with the publication plan) – The doctoral student took part in two (2) national scientific and practical conferences, with subsequent publication of reports (proceedings) in a collection (in accordance with the publication plan)
B- (75-79)	<ul style="list-style-type: none"> – The doctoral student provided a certificate of acceptance of two (2) publications (accepted) in journals included in the list – The doctoral student took part in two (2) international scientific and practical conferences, the materials of which are indexed in the WoS/Scopus International Database (in accordance with the publication plan) – The doctoral student took part in one (1) international scientific and practical conference, with subsequent publication of reports (proceedings) in a collection (in accordance with the publication plan) – The doctoral student took part in one (1) national scientific and practical conference, with subsequent publication of reports (proceedings) in a collection (in accordance with the publication plan)
C+ (70-74)	<ul style="list-style-type: none"> – The doctoral student provided a certificate of acceptance of one (1) publication for publication (accepted) in a journal included in the list – The doctoral student took part in one (1) international scientific and practical conference, with subsequent publication of reports (proceedings) in a collection (in accordance with the publication plan) – The doctoral student took part in one (1) international scientific and practical conference, with subsequent publication of reports (proceedings) in a collection (in accordance with the publication plan) – The doctoral student took part in one (1) national scientific and practical conference, with subsequent publication of reports (proceedings) in a collection (in accordance with the publication plan)
C (65-69)	<ul style="list-style-type: none"> – The doctoral student took part in two (2) international scientific and practical conferences, the materials of which are indexed in the WoS/Scopus International Database (in accordance with the publication plan) – The doctoral student took part in one (1) international scientific and practical conference, with subsequent publication of reports (proceedings) in a collection (in accordance with the publication plan) <p>The doctoral student took part in one (1) national scientific and practical conference, with subsequent publication of reports (proceedings) in a collection (in accordance with the publication plan)</p>
C- (60-64)	<ul style="list-style-type: none"> – The doctoral student took part in one (1) international scientific and practical conferences, the materials of which are indexed in the WoS/Scopus International Database (in accordance with the publication plan) – The doctoral student took part in two (2) international scientific and practical conferences, with subsequent publication of reports (proceedings) in a collection (in accordance with the publication plan) <p>The doctoral student took part in one (1) national scientific and practical conference, with subsequent publication of reports (proceedings) in a collection (in accordance with the publication plan)</p>
D+ (55-59)	<ul style="list-style-type: none"> – The doctoral student took part in one (1) international scientific and practical conferences, the materials of which are indexed in the WoS/Scopus International Database (in accordance with the publication plan)

	<ul style="list-style-type: none"> – The doctoral student took part in one (1) international scientific and practical conference, with subsequent publication of reports (proceedings) in a collection (in accordance with the publication plan) – The doctoral student took part in two (2) national scientific and practical conferences, with subsequent publication of reports (proceedings) in a collection (in accordance with the publication plan)
D (50-54)	<ul style="list-style-type: none"> – The doctoral student took part in one (1) international scientific and practical conference, with subsequent publication of reports (proceedings) in a collection (in accordance with the publication plan) – The doctoral student took part in one (1) national scientific and practical conference, with subsequent publication of reports (proceedings) in a collection (in accordance with the publication plan)
FX (25-49)	The doctoral student did not fulfill the publication plan for the second year
3rd year of study	
A (95-100)	<ul style="list-style-type: none"> – The doctoral student has published one article in a journal with a JCR impact factor or a CiteScore percentile of at least 25 in the Scopus database and two articles in journals included in the List – The doctoral student has published one article in a journal with a Q1 impact factor according to JCR or a CiteScore percentile of at least 75 in the Scopus database – The doctoral student has published one (1) article in a journal with an impact factor of Q1-Q2 in the WoS database or in a journal with a percentile of at least 35 in the Scopus database, – The doctoral student has published two (2) articles or one (1) article and one (1) review in the journal Q1-Q3 WoS or Scopus, percentile of at least 35 – The doctoral student has published a chapter in a monograph (at least three (3) printed pages), which is published in trusted publishing houses (clause 11.22 of this procedure)
A- (90-94)	<ul style="list-style-type: none"> – The doctoral student has published two (2) articles in journals included in the List and prepared for publication one (1) article in a journal that has an impact factor according to JCR or a percentile score according to CiteScore of at least 25 in the Scopus database (there is a document confirming acceptance for publication) – The doctoral student has published one (1) article in a journal that has an impact factor according to JCR or a percentile score according to CiteScore of at least 25 in the Scopus International Database and prepared for publication one (1) article in a journal included in Q1-Q3 of the JCR database or having Scopus database CiteScore percentile score of at least 35 (there is a document confirming acceptance for publication) – The doctoral student has published one (1) article and prepared for publication one (1) article or one (1) review in the journal Q1-Q3 WoS or Scopus, percentile of at least 35 (there is a document confirming acceptance for publication)
B+ (85-89)	<ul style="list-style-type: none"> – The doctoral student has published one (1) article in a journal included in the List and prepared for publication one (1) article in a journal that has an impact factor according to JCR or a percentile score according to CiteScore of at least 25 in the Scopus database and one (1) article in a journal included in the List (there are documents confirming acceptance for publication) – The doctoral student has prepared for publication one (1) article in a journal that has an impact factor according to JCR or a percentile score according to CiteScore of at least 25 in the Scopus International Database and one (1) article or one review (review) in a journal included in Q1-Q3 WoS or having a CiteScore percentile of at least 35 in the Scopus database (there are documents confirming acceptance for publication)

	– The doctoral student has prepared for publication a chapter in a monograph (at least three (3) printed pages), which was published in trusted publishing houses (there is a document confirming acceptance for publication)
C (65-69)	– The doctoral student prepared two (2) articles for publication in journals included in the List and one (1) article or one (1) review in a journal that has an impact factor according to JCR or a percentile score according to CiteScore of at least 25 in the Scopus database (there are documents confirming acceptance for publication)
FX (25-49)	The doctoral student did not fulfill the publication plan for the third year

Table 7.3– Approximate criteria for assessing the process of completing a doctoral dissertation (CR3)

Grade (letter system)	Criteria
1st semester	
A (95-100)	<p>Research proposal contains:</p> <p>a justified and clearly formulated topic of the dissertation research (no more than 12 words);</p> <p>object and subject of the research;</p> <p>goals and objectives of the research;</p> <p>justification of the scientific novelty of the dissertation research - the doctoral student clearly formulates how his research differs from previously conducted ones, referring to leading domestic and foreign scientists;</p> <p>adequate research tools (methodology) have been selected;</p> <p>a high-quality literature review on the topic of the dissertation research is presented - a fairly complete review of sources has been completed, including an analysis of the works of national and foreign scientists published in rating peer-reviewed scientific publications over the past five (5) years, the doctoral student is well versed in previously conducted research, clearly formulates their weak and strengths;</p> <p>the materials are designed in accordance with the requirements, clearly structured, and the scientific style of presentation of information is observed</p> <p>The doctoral student presented a Research proposal at the department's scientific seminar, the Research proposal was accepted without comments</p>
A- (90-94)	
B+ (85-89)	<p>Research proposal contains:</p> <p>a sufficiently substantiated topic of dissertation research (no more than 12 words);</p> <p>the object and subject of the research are not clearly formulated;</p> <p>the goals and objectives of the research are not clearly formulated;</p> <p>justification of the scientific novelty of the dissertation research - the doctoral student does not clearly formulate how his research differs from previously conducted ones, referring to leading domestic and foreign scientists;</p> <p>adequate research tools (methodology) have been selected, but there is no justification for the choice;</p> <p>a detailed literature review on the topic of the dissertation research is presented, including an analysis of the works of national and foreign scientists published in ranking peer-reviewed scientific publications over the past five (5) years, the doctoral student is familiar with the results of previously conducted research;</p> <p>there are comments on the design of materials and the style of presentation of information</p> <p>Research proposal can be approved after minor corrections</p>
B- (75-79)	
C+ (70-74)	
C (65-69)	<p>Research proposal contains:</p> <p>Insufficiently substantiated topic of dissertation research;</p> <p>the object and subject of the research are not clearly formulated;</p> <p>the goals and objectives of the research are not clearly and completely formulated;</p>
C- (60-64)	
D+ (55-59)	
D (50-54)	

	<p>justification of the scientific novelty of the dissertation research - the doctoral student cannot clearly formulate how his research differs from previously conducted ones;</p> <p>Some research tools (methodology) have been selected, but there is no justification for the choice;</p> <p>the literature review on the topic of the dissertation research is not carried out in sufficient detail, the presented sources do not allow for a detailed analysis of the area of research, the list of sources does not fully correspond to the topic of the dissertation, there is a description but there are no links to research by leading foreign and domestic scientists;</p> <p>there are significant comments on the design of materials and the style of presentation of information</p> <p>Research proposal can be approved after significant revisions</p>
F (0-24)	Research proposal is not submitted
2nd semester	
A (95-100)	<p>On the topic of the dissertation, a detailed and high-quality review of the literature was carried out, including a review of the works of leading domestic and foreign scientists published in international peer-reviewed scientific journals, indexed in the Wos and Scopus databases over the past five (5) years, the doctoral student is well versed in previously conducted research, clearly formulates their strengths and weaknesses.</p> <p>The theoretical part of the study was prepared and presented (Chapter 1), the collection of experimental data has begun.</p> <p>The content of the dissertation work meets the requirements for the structure and rules of presentation of scientific research.</p> <p>The materials are clearly structured and the scientific style of presentation of information is observed</p> <p>There are no comments on the work performed</p>
A- (90-94)	
B+ (85-89)	<p>The literature review on the topic of the dissertation research is not complete and contains references only to domestic or foreign scientists (over the last 5 years). However, the doctoral student demonstrates a sufficient level of knowledge of the main scientific trends in the field of research.</p> <p>The theoretical part of the study (Chapter 1) and experimental data are not presented in full, with some errors.</p> <p>There are comments on the research tools; the theory of scientific research is not sufficiently substantiated. The content of the dissertation work does not fully comply with the requirements for the structure and rules of presentation of scientific research.</p> <p>The materials are structured, but there are some comments regarding the style of presentation of information and data</p>
B- (75-79)	
C+ (70-74)	
C (65-69)	<p>The literature review on the topic of the dissertation research is not complete and contains references only to domestic scientists. The doctoral student demonstrates a low level of knowledge of the main scientific trends in the field of research, and is poorly oriented in the trends and main directions of his scientific field.</p> <p>The theoretical part of the study (Chapter 1) and experimental data are presented incompletely, with significant errors, and there are no logical connections between the parts of the study.</p> <p>There are comments on the research tools; the theory of scientific research is not substantiated.</p> <p>The content of the dissertation work does not fully comply with the requirements for the structure and rules of presentation of scientific research.</p> <p>The materials are not structured, there are significant comments on the style of presentation of information and data</p>
C- (60-64)	
D+ (55-59)	
D (50-54)	

FX (25-49)	<p>The review of sources on the topic of the dissertation has not been completed or does not correspond to the topic of the research.</p> <p>The theoretical part of the research is not presented.</p> <p>The content of the dissertation work does not meet the requirements for the structure and rules of presentation of scientific research.</p> <p>The materials are not structured; there are multiple comments on the style of presentation of information and data.</p>
3rd-6th semester	
A (95-100)	<p>Sections of the dissertation research were prepared and presented at the department's scientific seminar in accordance with the doctoral student's individual work plan.</p> <p>Using correctly selected tools, the necessary data was collected and processed to test the research hypothesis.</p> <p>The results obtained are adequate and significant, presented in an understandable manner.</p> <p>The materials are clearly structured and the scientific style of presentation of information is observed.</p> <p>No comments</p>
A- (90-94)	
B+ (85-89)	<p>Sections of the dissertation research were completed in violation of the deadlines (for objective reasons) presented in the doctoral student's individual work plan; there are minor comments on the work. However, this will not affect the timeliness of scientific research.</p> <p>Using correctly selected tools, data was collected and processed to test the research hypothesis.</p> <p>The results obtained are adequate and significant, presented in an understandable manner.</p> <p>The materials are structured, but there are some comments regarding the style of presentation of information and its content</p> <p>There are minor comments to the prepared sections of the dissertation work</p>
B- (75-79)	
C+ (70-74)	
C (65-69)	<p>Sections of the dissertation research were completed in violation of the deadlines (for objective reasons) presented in the doctoral student's individual work plan; there are comments on the work. There is a risk of failure to complete the research objectives and achieve the final goal.</p> <p>The interim results presented raise doubts among experts and are presented in a form that is difficult to analyze and compare.</p> <p>The materials are poorly structured; there are significant comments on the style of presentation of information and its content.</p> <p>There are significant comments on the prepared sections of the dissertation work</p>
C- (60-64)	
D+ (55-59)	
D (50-54)	
FX (25-49)	<p>The doctoral student has not completed an individual work plan in the field of preparation of the dissertation research, sections of the dissertation have not been prepared, experimental data have not been collected, which jeopardizes the fulfillment of the research objectives and the achievement of its goal.</p>

Table 7.4– Approximate criteria for assessing a doctoral student's scientific internship

Grade (letter system)	Criteria
A (95-100)	<p>The doctoral student completed a foreign scientific internship in accordance with the doctoral student's individual work plan; within the framework of the internship, the work plan was fully completed, all assigned tasks were solved, positive feedback was received from the foreign supervisor/supervisor of the internship, the report was drawn up in accordance with the requirements and submitted to the department on time. The doctoral student reported on the results</p>

	of the internship at a department meeting, the report was accepted without comments.
B+ (85-89)	The doctoral student completed a foreign scientific internship in accordance with the doctoral student's individual work plan; within the framework of the internship, the work plan was completed with minor deviations, most of the assigned tasks were solved, positive feedback was received from the foreign supervisor/internship director, the report was prepared in accordance with the requirements and submitted to the department on time. The doctoral student reported on the results of the internship at a department meeting, the report was accepted without comments/with minor comments.
C+ (70-74)	The doctoral student completed a foreign scientific internship in accordance with the doctoral student's individual work plan; within the framework of the internship, the work plan was completed with significant deviations, a positive review was received from the foreign supervisor/supervisor of the internship, the report was drawn up with violations and was submitted to the department late. The doctoral student reported on the results of the internship at a department meeting, the report was accepted with significant comments.
D (50-54)	The doctoral student did not completed a scientific internship in accordance with the doctoral student's individual work plan, but provided documents confirming the completion of an international foreign internship in the next academic period (invitation from a foreign consultant/host organization, internship plan, etc.)
FX (25-49)	The doctoral student did not completed a scientific internship in accordance with the doctoral student's individual work plan, there are no documents confirming the completion of an international foreign internship in the next academic period (invitation from a foreign consultant/host organization, internship plan, etc.)

Table 7.5– An example of a table for the final certification of PhD doctoral students at a department meeting

S No.	Doctoral student's full name	CR1	CR2	CR3	Final score
1					
2					

Assessment Methodology

1. In accordance with the criteria (table 7.1–7.3) the results of assessing all activities are entered in the table 7.5 (CR1, CR2 and CR3 columns).
2. The final score is calculated as the average (sum of scores for all criteria / number of criteria).