
	Kazakh-American Free University	Date 27.08.2021.
	Guidelines on the procedure for preparing, writing and defending a master's project	Internal Quality Assurance System "Educational process of KAFU"  Revision 1

**MINISTRY OF EDUCATION AND SCIENCE OF THE REPUBLIC OF  
KAZAKHSTAN**

**KAZAKHSTAN-AMERICAN FREE UNIVERSITY**

**TYPICAL GUIDELINES  
ON THE ORDER OF PREPARATION, WRITING AND DEFENSE OF THE  
MASTER'S PROJECT**

	Kazakh-American Free University	Date 27.08.2021.
	Guidelines on the procedure for preparing, writing and defending a master's project	Internal Quality Assurance System "Educational process of KAFU"  Revision 1

**Ust-Kamenogorsk, 2021**


## **1. REGULATORY DOCUMENTS**

When developing Methodological recommendations on the procedure for preparing, writing and defending a master's project, the following regulatory documents were used:

1. Law of the Republic of Kazakhstan "On Education" dated July 27, 2007 No. 319-III (with amendments and additions).
2. Law of the Republic of Kazakhstan "On Science" dated 18.02. 2011 No. 407-IV (with amendments and additions).
3. Model rules for the activities of educational organizations implementing educational programs of higher and (or) postgraduate education in accordance with Appendix 5 to the order of the Minister of Education and Science of the Republic of Kazakhstan dated October 30, 2018 No. 595 "On approval of the Model rules for the activities of educational organizations of the relevant types" (as amended and additions).
4. Qualification requirements for educational activities, and a list of documents confirming compliance with them. Order of the Minister of Education and Science of the Republic of Kazakhstan dated June 17, 2015 No. 391.
5. On amendments to the order of the Minister of Education and Science of the Republic of Kazakhstan dated April 20, 2011 No. 152 "On approval of the Rules for organizing the educational process on credit technology of education". Order of the Minister of Education and Science of the Republic of Kazakhstan dated October 12, 2018 No. 563. (Registered with the Ministry of Justice of the Republic of Kazakhstan on October 16, 2018 No. 17554).
6. State obligatory standard of education at all levels of education (Order of the Minister of Education and Science of the Republic of Kazakhstan dated October 31, 2018 No. 604. Registered with the Ministry of Justice of the Republic of Kazakhstan on November 1, 2018 No. 17669. (as amended on May 5, 2020 No. 182).

### **General provisions**

*A master's project* is a final work of a master's degree student of a specialized master's program, which is an independent study containing theoretical and (or) experimental results that allow solving an applied problem of an actual problem of the chosen educational program.

	Kazakh-American Free University	Date 27.08.2021.
	Guidelines on the procedure for preparing, writing and defending a master's project	Internal Quality Assurance System "Educational process of KAFU"  Revision 1

*The master's project must:*

- 1) correspond to the main issues of the educational program, according to which the master's project is defended;
- 2) be based on modern achievements in science, technology and production and contain specific practical recommendations, independent solutions to management problems;
- 3) be performed using advanced information technologies;
- 4) contain experimental and research (methodological, practical) sections on the main protected provisions.

The master's project is carried out by the undergraduate independently and solely, it must contain a set of new scientific results and provisions put forward for public defense. As a scientific work, the master's project should have internal unity and testify to the personal contribution of the undergraduate to science.

New solutions proposed by a master student must be strictly argued and critically evaluated in comparison with known solutions. Projects of applied importance provide information on the practical use of the obtained scientific results.


The content of the master's project should be based on new material, including a description of new facts, phenomena and regularities, as well as a generalization of previously known information from other scientific positions or in a completely different aspect. In this regard, such material may contain debatable issues related to the revision of existing views and ideas. The content of the master's project must meet the requirements of originality, uniqueness and inimitability of the given provisions.

*The form of presentation of the content of the master's project* should be characterized by the active use of the means of logical thinking, as well as the soundness of judgments and the accuracy of the data presented. The stylistic design of the material should be determined by the peculiarities of the scientific style of speech, the main feature of which is objectivity, arising from the specifics of scientific knowledge.

*The master's project* is submitted in the form of a manuscript in the state, Russian or English language.

It is possible to single out the main stages of the master's project:

- 1) choice of topic, appointment of a supervisor;
- 2) coordination with the supervisor of the work plan;
- 3) study of the requirements for the master's project;

	Kazakh-American Free University	Date 27.08.2021.
	Guidelines on the procedure for preparing, writing and defending a master's project	Internal Quality Assurance System "Educational process of KAFU"  Revision 1

4) studying the literature on the problem, determining the goals, objectives and methods of research;

5) direct development of the topic;

6) generalization of the obtained results;

7) reviewing the master's project;

8) defense and evaluation of the master's project.

### **Choosing a topic for a master's project and appointing a supervisor**

The theme of the master's project should be relevant, corresponding to the current state of science in the educational program and should be related to the direction of research of the graduating departments.

Undergraduates are given the right to choose a topic from the list of topics, which is considered at a meeting of the graduating department and approved by the Academic Council of the University.

The general list of topics of master's projects should be updated annually by at least 30% and provide undergraduates with the opportunity to prepare research within the framework of scientific projects carried out by the graduating department under the programs of applied scientific research.

The undergraduate chooses the topic of the master's project with the help of a supervisor. A master student can offer his own topic with the necessary justification for the expediency of its development.


When choosing a topic for a master's project, it is advisable to take a task of a relatively narrow plan so that it can be worked out in depth.

Significant assistance in choosing a topic is provided by familiarization with analytical reviews and articles in special periodicals, as well as conversations and consultations with practitioners, during which one can identify important issues that are still little studied in science.

The theme of the master's project is approved within two months after the enrollment of the undergraduate by order of the President of the University on the basis of the decision of the Academic Council.

At least 2 (two) months before the defense, it is allowed to adjust the theme of the master's project on the basis of a reasoned conclusion of the supervisor and the decision of the meeting of the department. Reapproval of the topic of the master's project is considered at a meeting of the Academic Council and approved by order of the President of the University.

To manage the master's project, a supervisor is appointed - a teacher who has the academic degree "candidate of science", or "doctor of science", or "doctor of philosophy (PhD)", or "doctor by profile", or the academic degree "doctor of

	Kazakh-American Free University	Date 27.08.2021.
	Guidelines on the procedure for preparing, writing and defending a master's project	Internal Quality Assurance System "Educational process of KAFU"  Revision 1

philosophy (PhD)" , or "Doctor in profile", or the degree of "Doctor of Philosophy (PhD)", or "Doctor in profile", corresponding to the profile of the requested direction, with at least three years of scientific and pedagogical work experience, who is the author of 5 scientific articles over the past five years in publications included in the List of scientific publications recommended for the publication of the main results of scientific activity, approved by the authorized body in the field of education and science and 1 scientific article in an international peer-reviewed scientific journal that has an impact factor according to JCR (JSR) or indexed in one of Science Citation Index Expanded, Social Science Citation Index, or Arts and Humanities Citation Index in the Web of Science Core Collection (Web of Science Core Collection shn) or CiteScore percentile indicator (SiteSkor) of at least 25 in the Scopus database (Scopus).

Appointment of supervisors from other universities is allowed if there are documents confirming the right to exercise scientific supervision.

To manage a master's project, consultants can be involved whose qualifications correspond to the direction of preparation of a master's student, and for a master's project carried out at the junction of directions, scientific consultants in a related field of science can also be involved.

Candidates for supervisors of undergraduates are approved within two months after enrollment by order of the President of the University based on the decision of the Academic Council.


If necessary, the supervisor can be reapproved by order of the President of the University based on the decision of the Academic Council.

### **Structure and rules for the design of a master's project**

The structural elements of the master's project are:

- 1) title page;
- 2) content;
- 3) normative references (if any);
- 4) definitions, symbols and abbreviations (if any);
- 5) introduction;
- 6) the main part;
- 7) conclusion;
- 8) list of sources used;
- 9) applications (if any).

*The introduction contains* the introductory part, purpose, tasks, scientific novelty and significance of the project, research methods, expected results.

	Kazakh-American Free University	Date 27.08.2021.
	Guidelines on the procedure for preparing, writing and defending a master's project	Internal Quality Assurance System "Educational process of KAFU"  Revision 1

The introductory part contains a brief description of the idea of the project, the problem it is aimed at solving.

The goal is stated concisely and specifically, should be relevant to the theme of the project, be achievable and reflect the nature of the solution that is expected to be obtained as a result of the project. The content of the goal should reflect the main question that is expected to be answered as a result of the study.

*Project tasks.* This section describes how to achieve the project goal through logically related, sequential tasks. A list of tasks is given.

Scientific novelty and significance of the project. The section should contain the following information:

1) prerequisites for the development of the project, (if any, preliminary results and (or) results previously obtained by the applicant related to the topic of the project are indicated);

2) substantiation of the scientific novelty of the project with a mandatory review of previous scientific studies conducted in the world and the Republic of Kazakhstan related to the topic under study, the existing lack of knowledge, and their relationship with this project (links to the literature used in the review should be indicated in the context, full transcript which should be presented in the "Bibliography" section), comparison of the expected results of the master's project with known existing analogues;

3) scientific and technological needs justifying the importance of the results of the project (if any, include social demand and (or) economic and industrial interest, other supporting data), the significance of the project on a national and international scale, the applicability of its results for the development of the relevant sphere of economy, science and (or) public relations;


4) the impact of the project on the level of research work, scientific and technical potential, the competitiveness of scientific organizations and their teams, the expected social and economic effect from the results of the project, the conditions necessary to achieve the expected effect.

*When describing this section, pay attention to the description of the following items:*

1) fundamental differences between the project idea and existing analogues. If the idea or result of the research already exists in the world and (or) in Kazakhstan, it is necessary to justify what are the advantages of the project;

2) if the end result of the project will be a product, it is necessary to describe the current state of the art in the subject area of the project in comparison with the product proposed within the project;



	Kazakh-American Free University	Date 27.08.2021.
	Guidelines on the procedure for preparing, writing and defending a master's project	Internal Quality Assurance System "Educational process of KAFU"  Revision 1

3) if the project is a continuation of the scientific research previously conducted by the applicant, it is necessary to clearly and concisely state the relationship of the project with the previously conducted scientific research and its differences from them.

*Research methods.* The section includes the following information:

1) a description of the main scientific issues and hypotheses of the project, the rationale for the research strategy and approaches, the types of research used in the project (descriptive, correlation and/or experimental), the sequence of research;

2) a brief description of the most important experiments;

3) a description of the research methods used in the project as a justification for the ways to achieve the goals set, their relationship with the goal and objectives of the project, among themselves;

4) methods for collecting primary (initial) information, its sources and application for solving project problems, methods for processing data, as well as ensuring their reliability and reproducibility;

5) conditions for registration and division of intellectual property rights to the results of the study (it is necessary to indicate which method of intellectual property protection will be chosen, justify the choice).

*Expected results.* The section describes the main result of the research, that is, the result corresponding to the achievement of the project goal, indicating its quantitative and qualitative characteristics and the form of implementation. The substantiation of the result is given in accordance with the purpose and objectives of the project.

*Additionally, the section may include:*

1) the impact of the expected results on the development of the main scientific direction and related areas of science and technology;


2) applicability and (or) the possibility of commercialization of the obtained scientific results;

3) social, economic, environmental, scientific and technical, multiplier and (or) other effect of the project results with justification;

4) other direct and indirect results of the project, indicating their qualitative and quantitative characteristics.

The main part consists of sections, subsections, paragraphs and subparagraphs.

Each section starts on a new page. The main text of each section may be preceded by a preface with a short description of the chosen direction and

	Kazakh-American Free University	Date 27.08.2021.
	Guidelines on the procedure for preparing, writing and defending a master's project	Internal Quality Assurance System "Educational process of KAFU"  Revision 1

justification of the applied research methods. At the end of each section, conclusions are formulated with a summary of the scientific and practical results presented in the section, which make it possible to distinguish general conclusions from minor details.

**The main part consists** of at least two sections, containing, in turn, at least two subsections:

1) Section 1 - presentation of general approaches and basic research methods, description of theoretical and (or) experimental developments;

2) Section 2 - analysis, generalization, evaluation and determination of the effectiveness of research results (technical, economic, environmental, etc.).

The first section substantiates the choice of the direction of research, provides methods for solving problems and their comparative assessments, and develops a general methodology for conducting research.

The second section presents the results of the undergraduate's own research, highlighting the new that he brings to the development of the topic. The undergraduate must evaluate the completeness and reliability of the results obtained by him, compare them with the data of similar studies by other authors.

The final part of the master's project (conclusion) should contain a brief overview of the main conclusions of the study. At the same time, the most important scientific and practical results obtained in the work are presented. In the first paragraph of the conclusions, the state of the issue is briefly assessed. Further conclusions should contain answers to all the tasks set in the introduction. All this will provide an opportunity to prove that the goals formulated in the introduction have been achieved. Emphasis should be placed on certain important results, justify their reliability, and provide recommendations for their use.


***The list of sources used is compiled in the order in which it is indicated in the text.***

When writing a master's project, a master's student must refer to the cited literature or to the literature from which the idea, conclusions, tasks, questions, the study of which the work is devoted, are taken. Reference should be made to the latest editions of publications. If information, materials from monographs, review articles, other sources with a large number of pages are used, then in the reference it is necessary to accurately indicate the numbers of pages, illustrations, tables, formulas from the source to which there are links.

To support your own arguments with references to an authoritative source or for a critical analysis of one or another printed work, you need to quote.

General citation requirements:



	Kazakh-American Free University	Date 27.08.2021.
	Guidelines on the procedure for preparing, writing and defending a master's project	Internal Quality Assurance System "Educational process of KAFU"  Revision 1

1) the text of the quotation begins and ends with quotation marks and is given in the grammatical form in which it is presented in the source, while maintaining the features of the author's spelling. Scientific lines proposed by other authors are not quoted, except for those that have caused general controversy;

2) the citation must be complete, without arbitrary reduction of the author's text and without distortion of the author's thoughts. The omission of words, sentences, paragraphs when quoting is allowed without distorting the author's text and is indicated by three dots, they are placed anywhere in the quotation (at the beginning, inside, at the end). If the missing text was preceded or followed by a separator character, then it is not saved;

3) each quote must be accompanied by a link to the source;

4) when indirectly quoting (retelling, stating the thoughts of other authors in your own words), which gives a significant savings in the text, you need to be extremely accurate in the presentation of the author's thoughts, correct in assessing his results and give appropriate references to the source;

5) if it is necessary to identify the attitude to individual words or thoughts from the quoted text, then after them in parentheses put an exclamation mark or a question mark;

6) when the author of the work, quoting, highlights some words in it, then a special warning is made, that is, after the text that explains the selection, a dot is put, then a hyphen and the author's initials are indicated, and the entire text of the warning fits in parentheses.


Each literary source included in the list must be reflected in the manuscript of the master's project. If the undergraduate makes a reference to any borrowed facts or quotes the works of other authors, then he must indicate in the reference where the materials are taken from. You should not include in the bibliographic list those works that are not referenced in the text of the master's project, and which have not actually been used.

Auxiliary or additional materials that for some reason cannot be included in the main part are placed in the **appendix**.

Applications are drawn up as a continuation of the master's project on its subsequent sheets. The application must have a meaningful title.

Applications may include:

- 1) intermediate mathematical proofs, formulas and calculations;
- 2) tables of auxiliary or numerical data;
- 3) protocols and test reports;
- 4) survey questionnaires or other types of empirical research used;

	Kazakh-American Free University	Date 27.08.2021.
	Guidelines on the procedure for preparing, writing and defending a master's project	Internal Quality Assurance System "Educational process of KAFU"  Revision 1

5) description of the equipment and instruments used in the conduct of experiments, measurements and tests;

6) instructions, methods, descriptions of algorithms and programs of problems solved by computers, developed in the course of the master's project;

7) illustrations (photographs) of an auxiliary nature;

8) acts of implementation of the results of the master's project, etc.

The scope of applications is not limited. In each case, the composition of the applications is determined by the undergraduate in agreement with the supervisor.

### **Rules for registration of a master's project**

The master's project must be completed using a computer and a printer on one side of a sheet of A4 white paper at 1.5 intervals. The font color should be black, the font should be Times New Roman, regular, size 14.

The text should be printed with the following margins: right - 10 mm, top - 20 mm, left - 30 mm and bottom - 20 mm.

The volume of the master's project is at least 40 pages.

It is allowed to use the computer capabilities of focusing on certain terms, formulas, theorems, using fonts of different fonts.

The quality of printed text and the design of illustrations, tables, printouts from a PC must meet the requirement for their clear reproduction.

When performing a master's project, it is necessary to observe uniform density, contrast and clarity of the image throughout the project. The master's project should have clear, not blurry lines, letters, numbers and signs.


Surnames, organization names, product names and other proper names in the master's project are given in the original language.

It is allowed to transliterate proper names and give the names of organizations translated into the language of the project with the addition (at the first mention) of the original name.

### *Building a master's project*

The names of the structural elements "Contents", "Normative references", "Definitions", "Designations and abbreviations", "Introduction", "Conclusion", "List of references", "Appendix" serve as headings of the structural elements of the work. Structural elements should be highlighted in bold.

The main part of the master's project should be divided into sections, subsections and paragraphs. Items, if necessary, can be divided into sub-items. When dividing the text of the master's project into paragraphs and subparagraphs, it is necessary that each paragraph contains complete information.

	Kazakh-American Free University	Date 27.08.2021.
	Guidelines on the procedure for preparing, writing and defending a master's project	Internal Quality Assurance System "Educational process of KAFU"  Revision 1

Sections and subsections should have headings. Items usually do not have headings. Headings should clearly and concisely reflect the content of sections, subsections.

Headings of sections, subsections and paragraphs should be typed with a paragraph indent from a capital letter without a dot at the end, without underlining.

If the heading consists of two sentences, they are separated by a dot.

Master's project pagination

The pages of the master's project should be numbered in Arabic numerals, following the continuous numbering throughout the text of the study. The page number is placed in the center of the bottom of the sheet without a dot.

*The title page is included in the overall page numbering. The page number on the title page is not affixed.*

Illustrations and tables located on separate sheets are included in the general pagination of the master's project.

Illustrations, tables on an A3 sheet are counted as one page.

*Numbering of sections, subsections, paragraphs, subparagraphs*

Sections of the master's project must have serial numbers within the entire work, indicated by Arabic numerals without a dot and written with a paragraph indent. Subsections should be numbered within each section. The subsection number consists of the section and subsection numbers separated by a dot. There is no dot at the end of the subsection number. Sections, like subsections, can consist of one or more paragraphs.

If the project does not have subsections, then the numbering of paragraphs in it must be within each section, and the paragraph number must consist of the section and paragraph numbers separated by a dot. There is no dot at the end of the paragraph number.

*Example*

**1                      Types and basic dimensions**


**1.1**  
**1.2**  
**1.3**

**} Numbering of paragraphs of the first section of the master's project**

**2                      Technical requirements**

**2.1**  
**2.2**  
**2.3**

**} Numbering of paragraphs of the second section of the master's project**

	Kazakh-American Free University	Date 27.08.2021.
	Guidelines on the procedure for preparing, writing and defending a master's project	Internal Quality Assurance System "Educational process of KAFU"  Revision 1

If the project has subsections, then the paragraph numbering must be within the subsection and the paragraph number must consist of the section, subsection and paragraph numbers separated by dots, for example:

### **3 Test Methods**

#### **3.1 Apparatus, materials and reagents**

3.1.1

3.1.2

3.1.3

**Numbering of paragraphs of the first subsection of the third section master's project**

#### **3.2 Preparing for the test**

3.2.1

3.2.2

3.2.3

**Numbering of paragraphs of the second subsection of the third section of the master's project**

If a section consists of one subsection, then the subsection is not numbered. If the subsection consists of one paragraph, then the paragraph is not numbered.

If the text is subdivided only into paragraphs, then they are numbered by serial numbers within the entire master's project.

Items, if necessary, can be divided into sub-clauses, which should have serial numbering within each clause, for example: 4.2.1.1, 4.2.1.2, etc.

Enumerations may be given within clauses or subclauses.

Each enumeration should be preceded by a hyphen or, if necessary, a reference in the text of the document to one of the enumerations, a lowercase letter (with the exception of ё, з, й, о, h, Ъ, Ы, Ь), after which a bracket is placed.

To further detail the enumerations, it is necessary to use Arabic numerals, after which a bracket is placed, and the entry is made from a paragraph indent, as shown in the example.

*Example*

a)

b)


1) \_\_\_\_\_

2) \_\_\_\_\_

с) \_\_\_\_\_

If the master's project consists of two or more parts, each part must have its own serial number. The number of each part should be put down in Arabic numerals on the title page under the type of master's project, for example, "Part 2".

Each structural element should start from a new sheet (page).

	Kazakh-American Free University	Date 27.08.2021.
	Guidelines on the procedure for preparing, writing and defending a master's project	Internal Quality Assurance System "Educational process of KAFU"  Revision 1

The numbering of pages of the master's project and applications included in the work must be continuous.

#### Illustrations

Illustrations (drawings, maps, graphs, diagrams, computer printouts, diagrams, photographs) should be placed in the text of the project immediately after the text in which they are mentioned for the first time, or on the next page.

Illustrations can be computer-generated, including color.

All illustrations must be referenced in the master's project.

Drawings, graphs, diagrams, diagrams, illustrations placed in the project must comply with the requirements of state standards of the Unified System for Design Documentation (ESKD).

It is allowed to make drawings, graphs, diagrams, diagrams by means of computer printing.

Illustrations, with the exception of illustrations of applications, should be numbered in Arabic numerals through numbering. The word "Figure" and its name are placed in the middle of the line.

Illustrations, if necessary, may have a name and explanatory data (figure text). The word "Figure" and its name are placed after the explanatory data and arranged as follows: Figure 1 - Details of the device

If the figure is located on more than one page, then the number and name of the figure are placed on the first sheet (page) with the designation of its sheet, on subsequent pages indicate only the number of the figure and sheet. (Example: Figure 1 - Instrument details, sheet 1; Figure 1, sheet 2)

It is allowed to number illustrations within the section. In this case, the illustration number consists of the section number and the number of the illustration, separated by a dot. For example, Figure 1.1.

The illustrations of each application are designated by a separate numbering in Arabic numerals with the addition of the application designation before the number. For example, Figure A.3.

Illustrations are drawn up in accordance with Appendix B.

When referring to illustrations, one should write "... in accordance with Figure 2" for continuous numbering and "... in accordance with Figure 1.2" for numbering within a section.

#### tables

Tables are used for better clarity and ease of comparison of indicators. The name of the table should reflect its content, be precise, concise. The name of the


	Kazakh-American Free University	Date 27.08.2021.
	Guidelines on the procedure for preparing, writing and defending a master's project	Internal Quality Assurance System "Educational process of KAFU"  Revision 1

table should be placed above the table on the left, without paragraph indentation, on one line with its number separated by a dash.

The table should be placed immediately after the text in which it is mentioned for the first time, or on the next page.

All tables must be referenced. When referencing, write the word "table" with its number. A table with a large number of rows can be transferred to another sheet (page). When transferring part of the table to another sheet (page), the word "Table", its number and name are indicated once on the left above the first part of the table, and above the other parts, the words "Continuation of the table" are also written on the left and indicate the number of the table, for example: "Continuation of the table one". When transferring a table to another sheet (page), the heading will be placed only over its first part.

A table with a large number of columns can be divided into parts and placed one part under the other within one page. If the rows and columns of the table go beyond the page format, then in the first case, the head is repeated in each part of the table, in the second case, the sidebar.

If the text repeated in different rows of the column of the table consists of one word, then after the first writing it is allowed to replace it with quotation marks; if from two or more words, then at the first repetition it is replaced with the words "The same", and then with quotation marks. It is not allowed to put quotation marks instead of repeated numbers, marks, signs, mathematical and chemical symbols. If numerical or other data in any line of the table is not given, then a dash is put in it.

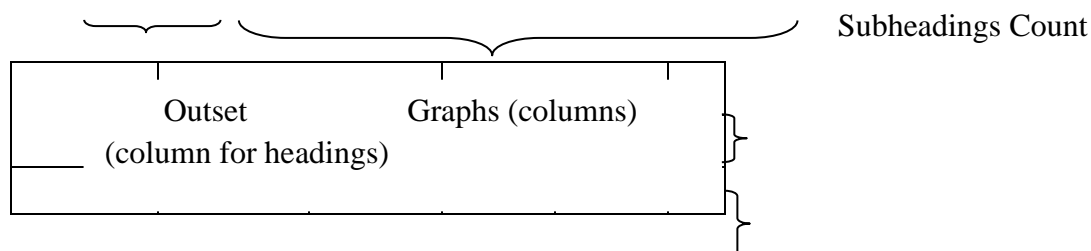
Column "No" in order, if necessary, is given, in other cases it is absent.

6.6.5 Digital material, as a rule, is presented in the form of tables. An example of table design is shown in Figure 1.


Table \_\_\_\_\_ - \_\_\_\_\_

} Count headings

digital material,





	Kazakh-American Free University	Date 27.08.2021.
	Guidelines on the procedure for preparing, writing and defending a master's project	Internal Quality Assurance System "Educational process of KAFU"  Revision 1

--	--	--	--	--	--

### Picture 1

Tables, with the exception of annex tables, should be numbered in Arabic numerals through numbering.

It is allowed to number the tables within the section. In this case, the table number consists of the section number and the ordinal number of the table, separated by a dot.

The tables of each annex are designated by separate numbering in Arabic numerals with the addition of the application designation before the number, for example, "Table B.1" if it is given in Appendix B.

The headings of the columns and rows of the table should be written with a capital letter in the singular, and the subheadings of the columns - with a lowercase letter if they make up one sentence with the heading, or with a capital letter if they have an independent meaning. Do not put dots at the end of headings and subheadings of tables. Tables on the left, right and bottom are limited by lines. It is allowed to use a smaller font size in the table than in the text.

It is not allowed to separate the headings and subheadings of the sidebar and the graph with diagonal lines.

Horizontal and vertical lines delimiting the rows of the table may not be drawn if their absence does not impede the use of the table.

The headings of the columns are written parallel to the rows of the table. If necessary, a perpendicular arrangement of column headings is allowed.

The head of the table should be separated by a line from the rest of the table.


### *Notes*

The word "Note" should be capitalized from the paragraph and not underlined.

Notes are given in the master's project, if explanations or reference data are needed for the content of the text, tables or graphic material.

Notes should not contain requirements.

Notes should be placed directly after the text, graphic material or in the table to which these notes refer. If there is only one note, then a dash is placed after the word "Note" and the note is printed with a capital letter. One note is not numbered. Several notes are numbered consecutively in Arabic numerals without a dot. A

	Kazakh-American Free University	Date 27.08.2021.
	Guidelines on the procedure for preparing, writing and defending a master's project	Internal Quality Assurance System "Educational process of KAFU"  Revision 1

note to the table is placed at the end of the table above the line indicating the end of the table.

*Example*

Note - Do not print subscripts.

Several notes are numbered consecutively with Arabic numerals.

*Example*

Notes

1 Subscripts are not printed;

2 Documents are notarized;

3 Approved by the head of the organization,

If additional clarification is needed, the note may be formatted as a footnote.

The footnote sign is placed directly after the word, number, symbol, sentence to which an explanation is given. The footnote sign is superscripted in Arabic numerals with brackets. It is allowed to carry out footnotes with asterisks "\*" instead of numbers.

The footnote is placed at the end of the page with a paragraph indent, separated from the text by a short horizontal line on the left. A footnote to the table is placed at the end of the table above the line indicating the end of the table.

*Formulas and Equations*

Formulas and equations should be separated from the text on a separate line. There must be at least one free line above and below each formula or equation. If the equation does not fit on one line, then it must be moved after the equal sign (=) or after the plus (+), minus (-), multiplication (x), division (:), or other mathematical signs, and the sign in repeat at the beginning of the next line. When transferring a formula on a sign symbolizing the multiplication operation, the "x" sign is used.

An explanation of the meanings of symbols and numerical coefficients should be given directly below the formula in the same sequence in which they are given in the formula.


Formulas should be numbered sequentially throughout the work with Arabic numerals in parentheses in the extreme right position on the line.

*Example*

$$A=a:b, \quad (1)$$

$$B=c:e. \quad (2)$$

One formula is - (1)

	Kazakh-American Free University	Date 27.08.2021.
	Guidelines on the procedure for preparing, writing and defending a master's project	Internal Quality Assurance System "Educational process of KAFU"  Revision 1

Formulas placed in annexes should be numbered separately in Arabic numerals within each application, with the addition of an application designation before each digit, for example, formula (B.1).

References in the text to ordinal numbers of formulas are given in brackets. Example - ... in formula (1).

The numbering of formulas within the section is allowed. In this case, the formula number consists of the section number and the ordinal number of the formula, separated by a dot, for example (3.1).

The order of presentation of mathematical equations is the same as formulas.

#### Links

References to these Rules, standards, specifications and other documents are allowed in the work, provided that they fully and unambiguously define the relevant requirements and do not cause difficulties in using the document.

Reference should be made to the document as a whole or to its sections and appendices, as well as to tables and illustrations. Links to subsections and paragraphs are not allowed, with the exception of subsections, paragraphs, tables and illustrations of these Rules.

When referring to standards and specifications, only their designation is indicated, while it is allowed not to indicate the year of their approval, provided that the standard is fully described in the list of sources used.

References to the sources used should be given in square brackets. References are numbered in Arabic numerals in the order in which references are given in the text of the master's project, regardless of division into sections.

With repeated reference to the same source, in square brackets, in addition to the ordinal number of the source, the corresponding page from the source is put down.

A link to your own publications is required.


Links to Internet sources are required.

#### *Definitions, symbols and abbreviations*

The list of definitions, designations and abbreviations should be in a column. On the left, in the order of mention or in alphabetical order, abbreviations, symbols, symbols, units of physical quantities and terms are given, on the right - their full transcript.

#### *List of sources used*

Information about the sources should be placed in the order of appearance of references to sources in the text of the master's project and numbered in Arabic numerals without a dot and printed with a paragraph indent.

	Kazakh-American Free University	Date 27.08.2021.
	Guidelines on the procedure for preparing, writing and defending a master's project	Internal Quality Assurance System "Educational process of KAFU"  Revision 1

### *Applications*

Applications are drawn up as a continuation of the master's project on its subsequent sheets

References should be given to all applications in the text of the master's project. Applications are arranged in the order of references to them in the text of the work.

Each application should begin on a new page with the word "Application" indicated at the top in the middle of the page, its designation.

The application must have a title that is written symmetrically with respect to the capitalized text on a separate line.

Applications are denoted by capital letters of the Russian alphabet, starting with A, with the exception of the letters Y, 3, Y, O, Ch, b, Y, b. The word "Appendix" is followed by a letter denoting its sequence.

It is allowed to designate applications with letters of the Latin alphabet, with the exception of the letters I, O.

In the case of full use of the letters of the Russian and Latin alphabets, it is allowed to designate applications with Arabic numerals.

If the document has one appendix, it is designated "Appendix A".

The text of each application, if necessary, can be divided into sections, subsections, paragraphs, subparagraphs, which are numbered within each application. The number is preceded by the designation of this application.


Applications must have a common pagination with the rest of the master's project.

### **The procedure for checking the work of the anti-plagiarism Internet system strikeplagiarism to check the written work of students.**

Plagiarism is the use and (or) appropriation of text, ideas, hypotheses, conclusions, methods, research results, graphs, codes, pictures or works of other authors without reference to the author and source of borrowing, as well as the use of text by other authors with a synonymous replacement of words and expressions without changing the meaning, including the use of text translated from another language

The procedure for plagiarism is carried out without fail for master's theses. Checking is carried out by the anti-plagiarism Internet system StrikePlagiarism.

Operators responsible for checking students' master's papers for plagiarism are appointed from among the employees of the University. The composition of operators for the University is approved by the first vice-president of KAFU.

	Kazakh-American Free University	Date 27.08.2021.
	Guidelines on the procedure for preparing, writing and defending a master's project	Internal Quality Assurance System "Educational process of KAFU"  Revision 1

The master's thesis must be checked and approved for verification by the supervisor, and sent to the operator for plagiarism 20 days before protection in the electronic version in doc format. The term for the verification is not more than 2 working days.

The fact of passing and accepting a thesis for verification is recorded by the operator by making an appropriate entry in the "Journal of Written Papers".

Similarity reports are the result of performance checks. Similarity coefficient No. 1 (hereinafter referred to as CP1) is calculated on the basis of short phrases (5 words) found by the system in other documents. Fragments of the document being checked, recognized as borrowed, are highlighted in colors:

*Green* - fragments found from sources found on the Internet.

*Red* - fragments found in the database of both your university and others,


*Yellow* - "Alarm", emphasizes characters belonging to a different alphabet, as well as text distortions that may indicate the concealment of unscrupulous borrowing.

For successful completion of the plagiarism procedure, the value of the similarity coefficient for master's projects of SP1 should not exceed 50%. Upon completion of the test, the system operator or supervisor at the department notifies the undergraduate about the results of the test. In case of passing the check, the relevant protocols/certificates and similarity reports are attached to the work.

If revision of the written work is necessary, the undergraduate can correct the work within 3 calendar days and then re-pass the anti-plagiarism procedure. In case of detection of plagiarism in the written work for the third time, the undergraduate passes the verification procedure on a paid basis. In total, the undergraduate is given no more than 3 attempts to check in the StrikePlagiarism system. If the student has not passed the verification procedure for the third time, then he is not allowed to defend.

After acceptance and positive assessment, the master's thesis goes into the internal repository of the University's sources. If the document was rejected, then the function of re-uploading the document becomes available. The collection of written works for uploading to the StrikePlagiarism system is carried out in order to fill the system database.

If the undergraduate disagrees with the decision of the supervisor based on the results of the verification of written works by the StrikePlagiarism system, the undergraduate files an appeal, which is considered by the commission established at the graduating department. The master student is given the opportunity to state his position regarding the independence of his written work. The commission

	Kazakh-American Free University	Date 27.08.2021.
	Guidelines on the procedure for preparing, writing and defending a master's project	Internal Quality Assurance System "Educational process of KAFU"  Revision 1

reviews the work and makes a decision on the admission / non-admission of the written work for defense.

Further, the work is allowed for protection; the appeal is satisfied, and the master's thesis goes through the procedure of normative control, after which it is sent for defense. If the appeal is not satisfied, or the work has not passed the test, the defense is transferred to the next period of the final assessment.

*Note.* Violation of the principles of academic honesty are the basis for the expulsion of a master student.

### **Master's project defense procedure**

The defense of the master's project is carried out at a meeting of the State Attestation Commission in the presence of the following documents:

- 1) positive feedback from the supervisor;
- 2) at least one publication in the KAFU journal (or other scientific journal), one speech at a scientific and practical conference;
- 3) decisions of the graduating department on the recommendation for defense (extract from the minutes of the extended meeting of the department);
- 4) recall of a reviewer whose qualifications (academic degree, academic title, degree of Doctor of Philosophy (PhD), Doctor of Philosophy or Master) correspond to the profile of the defended work, which provides a comprehensive description of the master's project and a reasoned conclusion on the possibility of awarding the degree "Master" in the relevant educational program.


Other materials that characterize the scientific and practical value of the completed master's project, certificates or acts of implementing the results of scientific research, layouts, etc. may also be submitted to the attestation commission.

The defense of the master's project is carried out at an open meeting of the attestation commission with the participation of at least 2/3 of its members.

The supervisor and reviewer must be present at the defense of the master's project. If the personal presence of scientific consultants and reviewers is not possible, the graduating department must organize their participation online in the form of a video conference, and in case of absence for a good reason, the head of the department reads the reviews.

In case of submission of a master's project written in the state language, at the request of a master student and with the consent of at least two-thirds of the members of the attestation commission participating in the meeting and the



	Kazakh-American Free University	Date 27.08.2021.
	Guidelines on the procedure for preparing, writing and defending a master's project	Internal Quality Assurance System "Educational process of KAFU"  Revision 1

reviewer, the defense can be carried out in the language in which the master's project is written. If necessary, the graduating department provides translation.

The duration of the defense of one master's project should not exceed 40 minutes.

The chairman of the attestation commission announces the defense of the master's project, names the topic, the names of the supervisor and the reviewer, reports on the availability of documents and their compliance with the established requirements.

The undergraduate makes a report of no more than 10 minutes, in which he briefly and clearly characterizes the purpose and objectives of the study, sets out the main results of the project, reasonably argues the conclusions and proposals, if necessary, referring to the prepared handout, graphic, presentation material.

After that, the scientific discussion begins. Members of the attestation commission ask the undergraduate questions on the issues raised in the master's project, research methods, clarify the results and procedure of experimental work, etc.


After the answers of the undergraduate, the chairman gives the floor to the supervisor and reviewer or reads the reviews of the supervisor and reviewer, in case of their absence.

After reading the reviews, the undergraduate is given the floor to respond to the comments contained in the reviews.

When evaluating a master's project, the following is taken into account:


- 1) relevance of the topic;
- 2) novelty of the obtained results;
- 3) application of new technologies in work;
- 4) the completeness of the literature review and the modernity of the sources used;
- 5) compliance with the requirements for registration;
- 6) the quality of the report at the defense of the master's project (clarity, literacy, ability to use professional terms, quality of demonstration material, etc.);
- 7) the correctness and completeness of the answers to the questions asked during the defense and to the comments of the reviewer.

Decisions on the evaluation of the defense of the master's project, as well as on the award of the appropriate qualification, are made by the attestation commission by open voting by a simple majority of votes of the commission members participating in the meeting.

	Kazakh-American Free University	Date 27.08.2021.
	Guidelines on the procedure for preparing, writing and defending a master's project	Internal Quality Assurance System "Educational process of KAFU"  Revision 1

When summing up the marks, the members of the attestation commission should be guided by the following criteria:

Item No.	Name of the component	Qualitative characteristics of the assessment of the master's project
1	2	3
1	Selection and analysis of scientific sources, compilation of a bibliographic list	1. The selection and analysis of the necessary scientific sources (including the last 3-5 years) was carried out in a timely manner and in full. 2. The bibliography is compiled in accordance with the scientific problem and research topic. 3. The first (theoretical) chapter has been prepared, containing an analytical review of sources, theoretical conclusions have been drawn.
2	Collection and primary classification of factual material	Collected 80% of the actual material, made the primary classification.
3	Analysis of factual material, preparation of a practical (research) chapter	Timely and in full, the analysis of all the factual material was carried out (in the amount of 100%), the research chapter was written, and conclusions were drawn.
4	Writing introduction, conclusion.	1. An introduction is written, including the necessary structural elements. 2. The conclusion contains the main conclusions on the project.
5	Project content	1. The content corresponds to the topic of the study, is characterized by relevance, novelty and practical significance, the right choice of research methods, the thoroughness of the analysis, insight into the essence of the problem, etc. 2. The work as a whole is relevant, it has reached its goal, the author knows the terminological apparatus, the methodology of analysis, however, there are errors in the study of factual material, in solving problems, etc.
6	Presentation project	The presentation is theoretically competent, the author logically and reasonably presented the content of the work, orients in its content and issues in general, demonstrates knowledge of the subject of research, owns modern terminology, clearly and correctly answers all the questions posed.

	Kazakh-American Free University	Date 27.08.2021.
	Guidelines on the procedure for preparing, writing and defending a master's project	Internal Quality Assurance System "Educational process of KAFU"  Revision 1

7	Project approbation	<ol style="list-style-type: none"> <li>1. The presence of a patent, an act of implementation, participation in competitive projects, participation in the development of economic contract topics, participation in the work of a conference, including a foreign one, publication in a scientific journal, including foreign ones.</li> <li>2. Availability of articles, participation in conferences, practical value, the possibility of further development of the topic in a doctoral dissertation and potential implementation of the results.</li> </ol>
---	---------------------	---

For each undergraduate, the secretary of the attestation commission fills out protocols in the prescribed form.

The minutes are signed by the chairman and members of the attestation commission who participated in the meeting.

The results of the defense of the master's project are announced on the day they are held.

After a successful defense, the graduating department transfers to the archive of the university the master's project, a review and review of the master's project, a list of scientific papers, a certificate on passing the "Anti-plagiarism" system operating at KAFU, protocols for defending the master's project and awarding the appropriate degree.