MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE

**SIMON KUZNETS KHARKIV NATIONAL UNIVERSITY
OF ECONOMICS**

Guidelines
for completing a thesis
for Master's (second) degree higher education students
of speciality 126 "Information Systems and Technologies"
of the study programme "Information Systems
and Technologies"

**Kharkiv
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Guidelines concerning the structure, content, organization of preparation and writing and the procedure for defending Master's theses are given. The basic requirements for the organization, the subject matter, content and formatting of Master's theses are presented.

For Master's (second) degree higher education students of speciality 126 "Information Systems and Technologies" of the study programme "Information Systems and Technologies".

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Introduction

The key stage in the training of masters in speciality 126 "Information Systems and Technologies" in accordance with the content of the study programme "Information Systems and Technologies" is the implementation of independent scientific research, the design of its results in the form of a Master's thesis and defence of the thesis at the examination committee meeting. The Master's thesis is a qualifying work that demonstrates all the learning outcomes and competences acquired by a higher education student within the Master's programme, it must be a completed scientific research aimed at solving current problems in the design, development and implementation of effective solutions based on information systems and technologies in various organizational, economic and technical systems.

According to the Law of Ukraine "On Higher Education" dated 01.07.2014 No. 1556-VII, the second (master's) level of higher education corresponds to the seventh qualification level of the National Qualifications Framework and provides for the acquisition of in-depth theoretical and/or practical knowledge, skills, abilities in the chosen speciality, mastering the general principles of the methodology of scientific and professional activity, and other competences sufficient to effectively perform the tasks of the relevant level of professional activity [1]. The research topics of Master's theses should correspond to the scientific areas of the Information Systems Department, as well as tasks that have practical and applied significance for implementation in the field of IT technologies, economics and research.

The guidelines set out the general requirements for the structure, content and scope of the Master's thesis, taking into account the specifics of training students in speciality 126 "Information Systems and Technologies" in accordance with the content of the educational and professional programme "Information Systems and Technologies" of the field of knowledge 12 "Information Technologies" [2; 7].

1. Choosing the topic and tasks of the Master's thesis

A Master's thesis is a qualifying work in which a student applies the learning outcomes and competences acquired by him/her in the process of higher education for getting a Master's degree. It must be a completed independent student's research aimed at solving an actual problem of designing, developing and implementing effective solutions based on information systems and technologies in various organizational, economic and technical systems. The research should not have only theoretical but also practical results. A Master's thesis involves the independent development or improvement of an information system or its components by a higher education student. Such work is based on a thorough analysis of information flows and existing information systems of a particular enterprise or business process. It is the consideration of the special requirements for the information system and the specifics of information flows that allows higher education students to get a result that has novelty and advantages over known solutions.

The topics of Master's theses are offered by leading professors of the Information Systems Department based on the focus of the department's research activities, taking into account the experience and professional interests of the higher education student. The topic of a Master's thesis can be clarified during the research practice and comprehensive training in the process of individual work of the higher education student with the supervisor proposed by the Information Systems Department and approved by the rector of the university. Within the framework of the proposed topic, the higher education student, with the help of the supervisor, determines the object, the subject, the purpose and tasks of the research that must be completed to achieve the goal. The topics of Master's theses are discussed and adjusted at a meeting of the Information Systems Department and approved by order of the rector of the university.

The research carried out within the framework of the Master's thesis must meet the standard of speciality 126 "Information Systems and Technologies", be based on the programme learning outcomes and demonstrate the acquisition of competences by the higher education student in accordance with the study programme "Information Systems and Technologies".

The learning outcomes of the study programme "Information Systems and Technologies" assume that a higher education student is able to carry out professional actions independently and purposefully. At the same time, the higher education student demonstrates the acquisition of the integral competence, general and special competences (Table 1).

Table 1

Learning outcomes and corresponding competences

Learning outcomes	Competences
LO01	IC
LO02	GC03
LO04	GC03
LO05	GC03, GC04, GC05
LO08	IC
LO09	IC
LO11	IC, GC03
LO12	IC, GC03, GC05

Note.

LO01. Searching for necessary information in scientific and technical literature, databases, other sources, analysing and evaluating this information.

LO02. Communicating freely in national and foreign languages in scientific, industrial and social spheres of activity.

LO04. Managing ICT development, implementation and operation processes that are complex, unpredictable and require new strategic and team approaches.

LO05. Determining the requirements for ICT on the base of business processes and needs of interested parties' analysis, development of technical tasks.

LO08. Developing models of information processes and systems of various classes, using methods of modelling, formalisation, algorithmization and implementation of models using modern computer tools.

LO09. Developing and using data warehouses, performing data analysis for decision support.

LO11. Solving the problems of digital transformation in new or unknown environments based on specialised conceptual knowledge, including modern scientific achievements in the field of information technology, research and integration of knowledge from various fields.

LO12. Improving the information system on the basis of business processes analysis.

IC. The integral competence is the ability to solve problems of a research and innovation nature in the field of information systems and technologies.

GC03. Ability to communicate with representatives of other professional groups at different levels (with experts from other fields of knowledge/types of economic activity).

GC04. Ability to develop and manage projects.

GC05. Ability to evaluate and provide the quality of the work performed.

2. Requirements for the Master's thesis

2.1. General requirements for the study

A Master's thesis involves the independent performance by a higher education student of all stages of scientific research from setting a task to obtaining a result, testing scientific positions, proving the reliability of conclusions and calculation results or the operability of systems and modules that have been developed. Adherence to academic integrity is an essential requirement for a thesis.

The research conducted in the Master's thesis must necessarily result in specific practical and/or theoretical proposals that have elements of scientific novelty.

The process of performing a Master's thesis should be based on a comprehensive study of the current practical and theoretical experience of both domestic and foreign specialists in the field of information technology, scientific and technical literature, materials of scientific conferences and seminars, information provided on the Internet and the media, etc.

The research is carried out by the higher education student independently under the direct general supervision of the supervisor. In the process of completing the thesis, the supervisor helps the student to build a work plan, choose research methods and tools in accordance with the purpose and characteristics of the topic, provides advice on modern approaches to solving problems and the specifics of applying research methods. The supervisor monitors the implementation of the work plan by the student, helps him or her prioritize certain components of the research.

2.2. The design of the thesis

The results of the Master's thesis are submitted in the form of a manuscript – a text document that is drawn up in accordance with the requirements of the Information Systems Department [2] based on the current standards of Ukraine for the preparation of reports on scientific works [4 – 6] and the provisions of S. Kuznets KhNUE [8]. Any violations of academic integrity (plagiarism, fabrication and falsification of data, etc.) in the manuscript and presentation of the results of the thesis are not allowed. The author of the thesis is directly responsible for the accuracy of the conclusions and provisions of the thesis, the use of factual material, as well as other information contained in the work.

The manuscript with the results of the thesis should have the following structure:

1) a cover sheet of the thesis (if the thesis is performed within the framework of a double degree programme or is defended in a foreign language, then in addition to the cover sheet in Ukrainian, a cover sheet in French or English is attached, respectively);

2) a sheet that contains data on the academic achievements of the higher education student, the supervisor's feedback, the dean's permission, and the department's decision to recommend the thesis for defence in the examination committee (in Ukrainian and in the language of defencing, if it is not Ukrainian);

3) a wide abstract in Ukrainian with information on all sections of 5 – 10 pages (for higher education students studying under the double degree programme, we also recommend that students, who have prepared the diploma in a foreign language, add this abstract);

4) an abstract (in Ukrainian and that translated into a foreign language for all higher education students) – a brief abstract of the thesis containing data on the scope of the thesis (the number of pages, tables, figures, the number of references, the number of appendices in the thesis). The following should be indicated: the object, the subject, and the purpose of the thesis; methods and technologies used in the research and design; a summary of the main results of the thesis with the main indicators and characteristics of the proposed solutions; information on implementation, and the scope of

possible application of the results of the work. Up to 10 keywords that reflect the essence of the work are highlighted separately;

5) the content of the thesis;

6) a list of abbreviations (if necessary);

7) the introduction;

8) the main part, which consists of theoretical, analytical and project sections. Each section should include 3 to 4 subsections. At the end of each section, conclusions are formulated. In accordance with the specifics of the thesis, in agreement with the supervisor, the student may add special sections that reveal the elements of the research;

9) conclusions;

10) a list of references – the recommended number of sources in the list of references should be at least 50, with sources published no earlier than 5 years before the thesis is written;

11) appendices.

The length of the explanatory note is 60 to 80 pages of text (excluding the list of references and appendices).

The approximate number of pages in the sections is as follows:

the abstract: 1 page;

the introduction: 2 pages;

the theoretical section: 12 – 15 pages;

the analytical section: 20 – 25 pages;

the project section: 20 – 35 pages;

theconclusions: 1 – 3 pages.

These documents are attached to the thesis:

1) a review of the thesis (diploma theses are reviewed by highly qualified specialists of industrial, scientific and project organizations, teachers who are specialists in this field [3]);

2) a presentation in the form of slides and posters for the report (it is allowed to prepare a presentation in electronic form);

3) a statement of compliance with professional ethics;

4) an information card for placing a thesis manuscript in the repository of Simon Kuznets Kharkiv National University of Economics;

5) certificates from enterprises, institutions and organizations on the permission to use their materials in writing the thesis (if such materials are used);

6) electronic versions of the student's publications, diplomas, certificates, implementation acts (if any) and other materials related to the thesis [3].

Detailed instructions on formatting the text of the thesis manuscript are given in the guidelines [2] and are mandatory. It should be noted that the requirements for formatting a thesis differ from the requirements for formatting the text of the guidelines. For the convenience of the student, the supervisor may provide samples or templates for the design and formatting of the structural elements of the manuscript (the title page, the abstract, the introduction, bibliography, etc.). Examples of defended theses (but not samples for repetition) are presented in the repository of S. Kuznets KhNUE [9].

2.3. Introduction as a structural element of the thesis

The introduction should include:

justification of the relevance and practical significance of the chosen topic of the Master's thesis;

the purpose of the work (the purpose must be useful, specific, such that it can be proved that the goal has been achieved; the purpose must correspond to speciality 126, that is, the programme learning outcomes and competences of the educational programme "Information Systems and Technologies" must be used to achieve it). You should not choose the broader goal of introducing innovations at the enterprise as the purpose of the research, you are only responsible for the information support of business processes;

objectives (work tasks which must be solved to achieve the goal);

the research object (a process or phenomenon that generates a problem situation and is selected for the study. The object of research should not be a specific enterprise, organization, institution or governmental body or its subdivision, on the example of which the work is performed, as this is the basis of the study);

the research subject (a specific aspect of the problem within the research object. The object and subject of research as categories of the scientific process are related to each other as general and particular. In the object, the part of it that is the subject of research is distinguished, it is on it

that the attention of the higher education student is focused, since the subject of research determines the topic of the Master's thesis);

brief information about the study;

a brief description of the methods used (briefly and meaningfully, define what exactly was studied by a particular method);

the results obtained, their scientific novelty and practical significance (developed proposals).

2.4. The theoretical section as a structural element of the thesis

The first section of any scientific research should analyse the state of the problem to be solved; search and analyse well-known works that have taken specific steps towards solving this or a similar problem; determine what issues remain unresolved and justify the purpose, tasks, research methods and areas of work – that is, the first section justifies the research task.

Depending on the specifics of the topic, the specific content of this section may vary. For example, if the thesis involves the creation or improvement of an information system of a particular enterprise, then the study of the state of the problem involves:

1) company characteristics (please note that the research base and the practice base may differ if the student is practicing in an IT company that serves a particular enterprise, organization, institution or government agency or its subdivision, on the example of which the work is performed – in this case, it is the research base that should be described, not the practice base): main directions and types of activities; main products (services), their purpose; organizational structure; the dynamics of the company's development;

2) management features (enterprise management systems): analysis of the management system; analysis of work organization, etc.; the location, role and functions of the unit (or a third-party IT company) responsible for information support of a business process or an automated system for managing certain production processes;

3) an overview of known analogues of the information system at other enterprises;

4) an overview of known methods and technologies that can be used to solve the problem of the thesis, including those transferred from other industries;

5) setting the research task, justifying the research plan.

2.5. The analytical section as a structural element of the thesis

The design of an information system or its improvement is based on a detailed study of its functions, features of information processes and building a model of future innovations. Such work is creative in nature, based on the application of experience, technologies and appropriate software tools for analysing the subject area and is based on modern methods of scientific research, among which modelling plays a leading role in the field of information systems and technologies.

In the process of such an analysis, you need to:

analyse the business process that the information system will serve, build a model of this process – an effective method of analysis is to create a graphical model using one of the generally accepted notations, but the higher education student can also build mathematical models or information-logic models used in automated decision support systems and other modern modelling methods;

describe the methods and technologies used at the enterprise to manage and implement the tasks set in the thesis (for all management functions);

among the methods and technologies discussed in the previous section as those that can be used to solve business problems, justify the choice of those that will ensure the effective achievement of the thesis result; solve, if possible, the optimization problem to select the optimal parameters of the information system or optimize information technology in accordance with the goal;

model the future information system, its module or other innovative impact on information technologies that support the business process; if necessary, build a use case diagram, an interface model, a logical database model, and an innovation implementation plan.

2.6. The project section as a structural element of the thesis

The implementation of the innovations proposed in the thesis involves practical implementation of the model developed by the student:

justified choice of software and hardware components of the system, programming languages and technologies;

construction of an algorithm or diagram of classes of a software complex (if the student creates the appropriate software);

implementation and filling of the database (if necessary);

a detailed description of the developed product and how it can be used in a business process (for example, for an information system, a description of the interface and examples of using it);

proving the reliability of the results obtained (for software and hardware – test results; for models – the limits of their adequacy based on the results of verification, assessment of calculation errors; for control systems or decision-making in situations of uncertainty – statistical analysis comparing actual and predicted values, etc.);

results of innovation implementation.

2.7. Conclusions as a structural element of a thesis

The conclusions briefly summarize:

the most important theoretical and practical provisions that contain an assessment of the results achieved in terms of compliance with the purpose of the Master's thesis and the tasks set out in the introduction;

prospects for further research – proposals for improvement in the field under study.

The sequence of conclusions should be consistent with the objectives set out in the introduction.

2.8. Appendices as a structural element of the thesis

It is advisable to include auxiliary material in the appendices that is used to complete the perception of the thesis:

a diagram of the organizational structure of the company's management;

intermediate mathematical proofs, formulas and calculations;

large calculation tables (two or more full pages);

program code fragments that reflect original algorithmic solutions;

tables of auxiliary digital data;

protocols, acts;

illustrations of an auxiliary nature;

data on the company's financial performance;

auxiliary materials of applied value (tables, figures, regulations on the work of departments of the enterprise or organization), etc.

3. Organization and procedure of execution of a Master's thesis

3.1. General provisions

To supervise the process of preparing a Master's thesis, a student is assigned a supervisor who holds a doctorate (PhD) and the academic title of Professor (Associate Professor). The scientific supervisor of the Master's thesis controls all stages of preparation, writing and design of the Master's thesis up to the moment of the thesis public defence.

The supervisor of the Master's thesis must:

provide practical assistance to the student in choosing the topic of the Master's thesis, developing and approving the schedule of the individual plan, setting the calendar deadlines for the implementation of its individual sections, and formulating the task for the preparation of the Master's thesis;

provide scientific and methodological guidance to the student's work on the Master's thesis and hold regular consultations;

systematically monitor the progress of the Master's thesis in accordance with the developed schedule;

provide qualified advice to the Master's student in the selection of scientific literature and factual material;

advise on the choice of methodology (technologies and tools) for conducting the research;

evaluate the quality of the work in accordance with the requirements set forth for it;

conduct a pre-defence of the Master's thesis in order to determine the student's readiness for public defence;

review the completed Master's thesis, submit a written review (as a part of the submission, see subsection 2.2) of the Master's thesis with a recommendation for defence.

A student who performs a Master's thesis must systematically report to the supervisor on the progress of its implementation in accordance with the schedule of the individual plan for the implementation of the Master's thesis and the results obtained.

The reports of the Master's thesis supervisors on the fulfilment of tasks in accordance with the terms of preparation of the Master's thesis are heard at the meetings of the Information Systems Department. If necessary, a higher education student may be summoned to a meeting of the department to report on the progress of the thesis.

The Master's thesis is performed by the student independently, taking into account the possibilities of practical implementation of certain provisions of the work. The supervisor of the Master's thesis may give certain recommendations regarding the provisions of the thesis, but the author of the Master's thesis is responsible for the final decisions and responsibility for them.

3.2. The stages of preparation of the completed thesis for defence in the examination committee

3.2.1. Preparing the manuscript, approbating and publishing the results

While completing the thesis, the student studies the theoretical material, completes the practical part of the work, and prepares the manuscript. In the process of completing the thesis, it is advisable to test its theoretical provisions at scientific conferences of various levels. It is advisable to publish new material in scientific journals or proceedings of scientific conferences.

3.2.2. Pre-defence of the Master's thesis

After completion and registration of the Master's thesis, the supervisor will organize a preliminary defence of the thesis in accordance with the regulations developed by the Information Systems Department. The preliminary

defence involves the presentation of the results of the thesis by the student to the commission created by the Information Systems Department in conditions as close as possible to the defence at the examination committee meeting. The results of the preliminary defence are the basis for recommending the Master's thesis for defence at the examination committee.

3.2.3. Reviewing

An external reviewer (a representative of an external institution) must familiarize himself/herself with the theoretical and practical results of the work and evaluate these results on a 100-point scale in the form of a written review (it may also be an internal reviewer in accordance with the university internal rules). Diploma theses are reviewed by highly qualified specialist from production, research, and design organizations, as well as professors who are specialists in this speciality [3]. After reviewing the Master's thesis, the reviewer draws up a corresponding review, which he or she signs. The reviewer's signature must be certified by the seal of the institution or enterprise where he or she works, or by a qualified centre for the provision of electronic trust services (in the case of using a qualified electronic signature). The review must characterize the relevance of the thesis topic, analyse its results, and draw a conclusion about their reliability, quality, scientific and practical significance. The review should outline the main advantages of the thesis, as well as list the disadvantages and provide any comments on the work. The final element of the review should be a conclusion on the compliance of the thesis with the requirements for Master's theses in speciality 126 "Information Systems and Technologies" and a recommended grade that the higher education student deserves. The student must be familiarized with the text of the review in a timely manner in order to be able to prepare responses to the comments made in the review.

3.2.4. Checking for plagiarism

A prerequisite for the admission of a Master's thesis to defence at the examination committee meeting is checking the manuscript for plagiarism. Preliminary verification of the manuscript for the originality of the text is carried out by the student and the supervisor using well-known Internet tools (it is recommended that publicly available free resources be used). After the

preliminary verification of the Master's thesis, the supervisor submits it to the secretary of the examination committee for additional verification. The final check for plagiarism is carried out by an authorized person in accordance with the regulations established by S. Kuznets KhNUE. To conduct such a check, the student must provide the supervisor with the full text of the thesis in electronic form according to the schedule established by S. Kuznets KhNUE taking into account the schedule of defence of Master's theses at the examination committee and the technical capabilities associated with the check. The percentage of textual borrowings in the manuscript of the thesis should not exceed 40 %, which will indicate the originality of the material provided. All test borrowings must be aimed at reviewing and analysing scientific and technical sources on the research topic and must be properly cited. In case of detection of a low level of originality of the text of the Master's thesis, it is transferred to the student for revision. The student must improve the analysis of the sources used, systematize the material, use tables and diagrams for convenient and concise presentation of data comparing different approaches to solving the research problem and various known solutions. The use of textual borrowings without proper reference to the source is considered plagiarism. If plagiarism is detected, the Master's thesis cannot be accepted for defence.

3.2.5. Defence of the Master's thesis

The Master's thesis is defended at a meeting of the examination committee. The chairman and members of the examination committee are approved by the rector of S. Kuznets KhNUE by an appropriate order. The Information Systems Department draws up a schedule for the defence of Master's theses in advance, which is agreed with the chairman of the examination committee and approved by the vice-rector for scientific and pedagogical work. The schedule is communicated to the students and posted on the website of the Information Systems Department and the website of the Faculty/Institution. According to the Regulations on the certification of higher education students of S. Kuznets KhNUE [3], if a higher education student does not appear at the meeting of the examination committee to defend his or her thesis, the minutes of the examination committee record that he or she is not certified due to failure to appear at the meeting of the committee.

The meeting of the examination committee begins with a speech by the chairman of the examination committee, in which the basic requirements are communicated to students, and the rules and procedure for speaking are established. Each work is presented by the secretary of the examination committee, who announces the surname, name and patronymic of the higher education student, the topic of the Master's thesis, the name and position of the supervisor. After that, the floor is given to the higher education student. The time of his/her speech should not exceed 10 minutes. In his/her speech, the higher education student must cover the following issues:

the relevance of the chosen topic;

the purpose and objectives of the study;

the object and subject of the research;

analysis of the subject area;

analysis of existing solutions in terms of their compliance with the research objective;

setting the task and justifying the choice of methods to achieve the goal;

a detailed description of the research process and results;

scientific novelty of the results;

practical significance of the results obtained;

information on the testing and implementation of the results obtained;

prospects for further research in this area.

The report is accompanied by a presentation that contains illustrative and mandatory graphic material of the Master's thesis and is demonstrated using technical tools. During the report, it is advisable to provide a demonstration of the experiments conducted and the functioning of the software developed in the process (students can use a previously prepared video recording of up to 2 minutes).

After the presentation, the higher education student answers questions of the members of the examination committee. After that, the examination committee listens to the speech of the supervisor with a brief description of the work of the higher education student in the process of preparing the work or the secretary announces the feedback of the supervisor.

The secretary of the examination committee reads the review and the student is given the opportunity to respond to the reviewer's comments. The

duration of the defence of one Master's thesis should not exceed 30 minutes. The announcement of the end of the defence is made by the chairman of the examination committee.

The results of the Master's thesis defence are announced to the student on the day of the defence after a confidential discussion by the members of the examination committee. Each member of the examination committee evaluates the work and defence of the student separately in accordance with the defined evaluation criteria. The content of the work, the scientific novelty and practical significance of the results obtained, the quality of the thesis, the student's report and answers to questions, the review and conclusion of the reviewer, and the availability of published scientific papers on the topic of the work should be taken into account. The chairman of the examination committee summarizes the grades given by the members of the examination committee and makes the final decision on the grade received by the student for the defence of the thesis. If the student has diplomas of the winner or prize-winner of the International (All-Ukrainian) Student Olympiad or the International (All-Ukrainian) Student Research Paper Competition, the members of the examination committee may decide to grant additional points that are added to the final grade.

After the regular completion of the work of the examination committee and the final approval of grades for the defence of Master's theses, the chairman of the examination committee informs the students of higher education about the grades, announces the award of a Master's degree in speciality 126 "Information Systems and Technologies".

The results of each meeting of the examination committee are documented in the relevant protocol, which reflects the assessment and the decision of the committee to award the students a Master's degree.

3.3. Evaluation criteria for Master's thesis

3.3.1. The Master's thesis is evaluated on the basis of the thesis defence at the examination committee on a 100-point scale, taking into account the following components:

the content of the work, scientific novelty and practical significance of the results obtained;

the quality of the thesis design;

student's presentation and answers to questions;

review and conclusion of the reviewer;

feedback from the supervisor on the progress of the student's work on the tasks assigned;

approbation of the results of the thesis;

implementation of the results of the thesis;

availability of published scientific papers on the topic of the work.

3.3.2. The student receives 60 – 73 points if the tasks of the thesis are generally completed, the report is drawn up in accordance with the requirements, during the presentation and answers to the questions of the committee members, the higher education student demonstrates an understanding of the subject area, the essence of the results of the thesis and the methods used in the study.

3.3.3. The student receives 74 – 89 points if the requirements for clause 3.3.2 are met, the reviews of the reviewer and supervisor are positive, there is an approbation of the results of the thesis at scientific seminars or conferences, the scientific novelty and practical significance of the results of the thesis are not in doubt.

3.3.4. The student receives 90 – 100 points if the requirements for clause 3.3.3 are met, the reviews of the reviewer and supervisor are high, the results of the thesis have significant scientific novelty or have been implemented (prepared for implementation) in the practice of the management object, scientific papers based on the materials of the thesis have been published.

3.3.5. The student receives 1 – 59 points if one of the requirements under clause 3.3.2. is not fulfilled, that is, the tasks of the thesis are not completed and/or the preparation of the report and other documentation does not significantly meet the requirements and/or the higher education student does not answer the questions of the committee members to confirm his/her understanding of the subject area and independence of work.

According to clause 3.17 of the Regulations on the Certification of Higher Education Students of Simon Kuznets Kharkiv National University of Economics (new edition) [3], a higher education student who received less than 60 points in the defence of a diploma work is expelled from the University. He/she is given an academic certificate of the established form. In more detail, possible further actions of a higher education student in this case

are defined in clauses 3.16 – 3.21 of the Regulations [3]. In case of detection of plagiarism, fabrication, falsification and other violations of academic integrity during the defence, the thesis is withdrawn from defence at any stage without the possibility to defend it repeatedly.

3.3.6. If a student has diplomas of the winner or prize-winner of the International (All-Ukrainian) Student Olympiad or the International (All-Ukrainian) Student Research Paper Competition, the members of the examination committee may decide to grant additional points that are added to the final grade.

References

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Самостійне електронне текстове мережеве видання

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Коректор *З. В. Зобова*

Подано методичні рекомендації щодо структури, змісту, організації підготовки та написання й порядку захисту дипломних робіт освітнього рівня "магістр". Наведено основні вимоги до організації, тематики, змісту та оформлення магістерських дипломних робіт.

Рекомендовано для здобувачів вищої освіти спеціальності 126 "Інформаційні системи та технології" освітньої програми "Інформаційні системи та технології" другого (магістерського) рівня.