By the meeting of the Academic Council of the program «Cognitive Sciences and Technologies: from neuron to cognition» (№ 2.14-01./1 from 23/08/22)

GUIDELINES

for the preparation, evaluation, and defence of term papers and Master's theses for students of the Master's programme "Cognitive Sciences and Technologies: From Neuron to Cognition" at National Research University Higher School of Economics

1. GENERAL REQUIREMENTS FOR TERM PAPERS

- 1.1 Term Papers are a separate type of academic activity and a form of student research/project work.
- 1.2 Completion of term papers by students allows them to deepen their knowledge and skills acquired during theoretical and practical classes, gain skills in the independent studying of the materials related to the term paper, and develop competencies for conducting analytical, research, project activities, as well as processing of information.
- 1.3 Students of an educational programme can have no more than one term paper per academic year.
- 1.4 Term papers can be completed in one of the following formats:
- 1.4.1. A research term paper is an analysis and synthesis of theoretical and empirical material, designed to support the reinforcement and application of skills and knowledge acquired while mastering the degree programme, as well as the proposal of an empirical research plan aimed at developing practical skills for research activities.
- 1.4.2 A term project is an analysis and synthesis of theoretical and empirical material designed to contribute to the reinforcement and application of skills and knowledge acquired while mastering the degree programme, as well as the completion of empirical research aimed at developing practical skills for research activities.
- 1.5. Term papers must be written entirely in English.
- 1.6. Term papers can only be completed individually.
- 1.7. The topic of the term paper, as well as its academic supervisor, shall be chosen by November 18 of the current academic year on the basis of a student application (see **Appendix 1**). The topic of the term paper is proposed in two languages: English and Russian.
- 1.8. A change in the term paper topic, but not the academic supervisor, can be made on the basis of a student's relevant application (see **Appendix 2**) no later than May 12 of the current academic year.
- 1.9. A change in the term paper topic and the academic supervisor can be made on the basis of a student's relevant application (see **Appendix 2**) no later than February 1 of the current academic year.
- 1.10. The structure, content, volume, and requirements for formatting the term paper are determined in **Appendix 5** («Thesis manual»).

2. GENERAL REQUIREMENTS FOR MASTER'S THESES

- 2.1. The Master's thesis is a core element of the degree programme and a form of student research/project work; defence of the thesis is an obligatory part of the final state certification (FSC).
- 2.2. A Master's thesis is completed in the format of a Master's thesis or a Master's project.
- 2.3 The topic of the Master's thesis shall be chosen during the second year of study no later than November 11 on the basis of a student application (see **Appendix 3**). The topic of the thesis is proposed in two languages: English and Russian.
- 2.4 The main formats of the Master's thesis are as follows:
 - 2.4.1 Academic format: research aimed at obtaining new knowledge about the structure, properties, and mechanisms of the subject studied (phenomenon).
 - 2.4.2 Project/research format: the development (individually or as part of a group) of a practical problem, the result of which is the creation of some kind of product (project solution).
- 2.5. The Master's thesis is completed entirely in English.
- 2.6 A change in the topic of the Master's thesis and its academic supervisor can be made on the basis of a student application (see **Appendix 4**) no later than February 15 of the final academic year.
- 2.7. A change in the topic of the Master's thesis, but not the academic supervisor, can be made on the basis of a student application (see **Appendix 4**) no later than a week after the preliminary defence in the final academic year.
- 2.8 The structure, contents, volume, and requirements for formatting the Master's thesis are determined in **Appendix 5** («Thesis manual»).

3. STAGES OF TERM PAPER PREPARATION

- 3.1 The schedule for completing terms papers is agreed upon by the student with the term paper supervisor appointed as per a directive, and must include the following control points:
 - submission of the term paper project to the term paper supervisor by the student (normally, it should present the goal, structure of the work, and the list of the main sources for completing the given work) by December 20 of the current academic year;
 - **preliminary presentation (pre-defence)** of the term paper as a part of a research seminar, by April 30 of the current academic year;
 - **first submission of the completed term paper to the supervisor,** followed by introducing adjustments to the said term paper (if necessary), by May 12 of the current academic year;
 - submission of the final version of the term paper to the supervisor by May 19 of the current academic year;
 - the uploading of the term paper to the LMS system to be checked for plagiarism by the "Turnitin" system, 7 (seven) working days before the defence of the term paper;
 - evaluation by the supervisor (writing feedback) of the term paper¹, no later than 4 (four) days before the date of defence;

¹ For a template of the evaluation sheet for a term paper supervisor, please refer to Appendix 3 to these Regulations.

- **public defence** of the term paper, between June 1 and June 15.
- 3.2 The student is obligated to upload the final version of the term paper to the LMS system and submit it to the supervisor within the timeframe specified in the directive (see p. 4.2.7 of the Regulations).
- 3.3 The work is submitted in an electronic format. The student shall attach the report generated by the LMS system and the feedback by the academic supervisor on the day he/she defends the term paper.
- 3.4 The term paper's check is completed after its evaluation by the term paper supervisor and the public defence of it. The grade for the term paper is made known to the student by way of sending it to his/her corporate email/posting in the relevant LMS module.
- 3.5 A student who receives an unsatisfactory grade for the term paper is considered to have failed the academic assignment. He/she is obligated to handle this academic failure as per the procedures established by the University's internal bylaws, namely by addressing the notes to the term paper left by its supervisor and, if necessary, by modifying the text of the term paper; in addition, the topic of the term paper² may be changed. A change in the topic is enacted by a directive from the faculty dean.
- 3.6 The term paper is evaluated by the academic supervisor and academic board according to p. 7 of these Guidelines.

4. STAGES OF THE MASTER'S THESIS PREPARATION

4.1 **Preparation of a project of Master's thesis.** A project of the Master's thesis can be prepared by the student during a research seminar and individual consultations with the supervisor (potential supervisor).

The project of the Master's thesis is evaluated by the Master's thesis supervisor as either "approved" or "not approved"; the grade is recorded in the assessment record sheet or in the special LMS module. The student has the opportunity to finalize the project of the Master's thesis that has not yet been approved and re-submit it (specific dates for resubmission and re-evaluation are agreed on by the supervisor of the Master's thesis, but can be no later than December 15 of the final academic year).

- 4.2 **Preliminary presentation of the Master's thesis** (pre-defence) within the framework of a research seminar, by April 30 of the final academic year.
- 4.3 **Submission of the first version of the Master's thesis.** The text of the first version of the Master's thesis is submitted to the supervisor so that he/she could leave comments; if necessary, the text is further adjusted. The presentation of the first completed version of the Master's thesis shall occur no later than March 26 of the final academic year.
- 4.4 Preliminary presentation of the Master's thesis/project (pre-defence) is conducted as part of a research seminar by April 30 of the final academic year.
- 4.5 Finalization of the Master's thesis, preparation of the final version of the Master's thesis. At this stage, if necessary, an adjustment is made by the student to the Master's thesis. Upon completing this stage, the student presents the final version of the Master's thesis and the abstract to the academic supervisor for getting feedback. The supervisor of the Master's thesis or the student is obligated to present to the Programme Office of his/her degree programme the feedback on the Master's thesis within 4 (four) calendar days before the date of defence. (For a template of an academic supervisor's feedback form, see **Appendix 6**).

² The possibility of changing term paper supervisors in such instances is established by the Guidelines.

4.6 The uploading of the Master's thesis in the "Turnitin" system. By May 19, the student must make sure to upload the final version of the Master's thesis in electronic (scanned versions are not accepted) format in the special LMS module for supporting processes related to term papers and Master's theses, after which it is sent to the "Turnitin" system.

In the event that plagiarism is definitively detected during the preparation of the Master's thesis, disciplinary measures must be imposed on a student in accordance with the Procedures for Applying Disciplinary Measures for Violations of Academic Standards for Student Papers at National Research University Higher School of Economics (which is Appendix 7 to HSE University's Internal Regulations).

4.7 Presentation of the final version of the Master's thesis to the programme office. The final version of the Master's thesis shall be submitted by the student to the programme office in the electronic format.

4.8 Reviewing the Master's Thesis.

The reviewer is appointed from among the teachers and researchers of the University. Reviewers can also be representatives from other institutions of higher education or employees of other organizations from the professional sphere that corresponds to the topic of the Master's thesis.

Reviewers are proposed by the academic supervisor of the student completing the Master's thesis and approved by the academic committee of the degree programme.

A directive on the appointment of the reviewer is signed by the Faculty Dean upon its submission by the academic supervisor of the degree programme no later than one month before the scheduled date for the defence of the Master's thesis. The Surname/Name/Patronymic of the student, the topic of the Master's thesis, and information about the reviewer (full name, academic credentials, academic title, place of work, and position) must be indicated in the directive.

The reviewer is obligated to conduct an expert analysis of the main provisions of the Master's thesis under review, the indication of a personal point of view/project solution, the ability to use methods of scientific research/design, the degree of validity of the conclusions and the recommendations/adequacy of the means to achieve results, and the reliability of the results/the viability of the products and decisions, their novelty, and practical relevance. A template of the review form for reviewers is provided in **Appendix 7** to these Guidelines.

The programme office of the degree programme sends the Master's thesis to the reviewer no later than 3 (three) calendar days from the date of its receipt. The reviewer draws up and submits a written review of the Master's thesis to the responsible party from the programme office of the degree programme no later than 6 (six) days before the date of the defence of the Master's thesis.

The contents of the Master's thesis review are made known to the student by the programme office of the degree programme no later than 5 (five) calendar days prior to the date of the defence of the Master's thesis, so that the student can prepare well-grounded answers to the comments made by the reviewer.

4.8 **Defence of the Master's thesis** is assessed by the academic supervisor, reviewer, and academic board according to p. 7 of these Guidelines.

5. REQUIREMENTS FOR THE FEEDBACK ON TERM PAPERS OR MASTER'S THESES FROM ACADEMIC SUPERVISORS

- 5.1 The feedback on a term paper or Master's thesis by the academic supervisor shall be drawn up after the student presents the final version of the term paper or Master's thesis, and the review is then submitted to the programme office of the degree programme no later a week till the date of the defence (see **Appendix 6**).
- 5.2 The term paper or Master's thesis is evaluated according to the following criteria:
 - 5.2.1 The degree of the student's involvement in the process of preparation of the term paper or Master's thesis.
 - 5.2.2 The full compliance with the plan of the term paper or Master's thesis.
 - 5.2.3 Possession of theoretical knowledge about the project.
 - 5.2.4 Possession of experimental knowledge about the project.
 - 5.2.5 Logical coherence of the text.
 - 5.2.6 Appropriate format of the text.

6. REQUIREMENTS FOR THE REVIEW OF THE MASTER'S THESIS BY THE REVIEWER

- 6.1 The review of the Master's thesis by the reviewer shall be drawn up after the student presents the final version of the Master's thesis and is then submitted to the programme office of the degree programme (see **Appendix 7**), and the review is then submitted to the programme office of the degree programme no later a 6 (six) days till the date of the defence.
- 6.2 The Master's thesis is evaluated by the reviewer according to the following criteria:
 - 6.2.1 The coherency and connectedness of the main provisions presented in the Master's thesis.
 - 6.2.2 Ability to apply research methods.
 - 6.2.3 Adequacy of the means to achieve results.
 - 6.2.4 Reliability of the results.
 - 6.2.5 The novelty of the research work.

7. PROCEDURE FOR THE DEFENCE OF THE TERM PAPER OR MASTER'S THESIS

- 7.1 The final grade for the term paper or Master's thesis is given during the defence of the term paper or Master's thesis.
- 7.2 A student defending a term paper has 10 minutes to present his/her term paper.
- 7.3 A student defending a Master's thesis has 20 minutes to present his/her Master's thesis.
- 7.2 The grade for the term paper is calculated on the basis of the average grade of the academic supervisor and academic board, taking into account the assessment of the academic supervisor.
- 7.3 The grade for the Master's thesis is evaluated on the basis of the grade given by the reviewer, taken with a coefficient of 0.2, the grade of the supervisor, taken with a coefficient of 0.2, and that of the academic board, taken with a coefficient of 0.6. All grades (reviewer, academic supervisor, and board), including the final grade for the thesis, must be **integers.**

- 7.4 An academic board is composed of no fewer than 3 (three) people and is formed from among teachers of the degree programme, both for the defence of a term paper and for the defence of a Master's thesis.
- 7.5 The academic board evaluates the presentation of the term paper or Master's thesis (coherence of the presentation, the level of development of the topic, the ability to use scientific methods, the adequacy of the means to achieve results, the ability to answer questions).
- 7.6. The grade of the academic board is calculated as the arithmetic average of all the grades given by all members of the academic board.