

PROVISION
on the International competition of student scientific works
«Smart brain»

I. GENERAL PROVISIONS

1. The competition is held for the purpose of activation and further development of students' scientific and technical creativity, formation of scientific work skills, deepening of theoretical and practical training, mastering of innovative technologies.

2. The founders of the competition are

3. Students who are enrolled in bachelor or master degree programs (hereinafter – students) at universities and colleges (hereinafter – Universities) can participate in the competition. Students should submit works that they prepared themselves, that contain elements of novelty and originality.

4. The Organizing committee shall control the organization, holding and compliance with the requirements of this Provision.

5. The competition is held in accordance with the following sections:

- Intelligent software technologies for Data Science
- Software technologies for image, video, audio processing
- Software technologies for program and data protection
- Automation and Artificial Intelligence in Software Engineering
- Programming Big Data Internet of Things.

5. The competition commission shall review the works, nominate candidates for encouragement, conduct the second stage of the competition – the scientific conference.

The competition commission includes scientific, scientific and pedagogical staff of Universities, scientific institutions, enterprises, public organizations, etc. (under their consent).

II. REQUIREMENTS TO STUDENT SCIENTIFIC WORKS

1. The works submitted to the content must be authored by students. Each work should correspond to one of the sections defined above and should present scientific research.

2. One scientific work can have several authors. If the authors of a scientific work are students from different Universities, there may be scientific supervisors from different higher education institutions.

3. A scientific work of a student:

- should include a title page (that contains only a code and title of the work), table of contents, introduction, chapters, conclusions, the list of references (Addendum 1)

- a work is accompanied by an annotation which indicates the relevance, purpose, task, methodology of research and a general characteristics of the work (Addendum 2)

- should contain references to sources of information if the authors used third-party ideas, statements, information

- the total length of work should not exceed 30 pages excluding appendices

and the list of references; there is no required minimum number of pages

- drawings and illustrations attached to work should be arranged on an A4 sheet.

4. The following accompanying documents are submitted separately:

- information about the author (authors) and scientific supervisor (Addendum No. 3 or registration on the site).

5. Language of scientific work and report - English

III. THE PROCEDURE OF SUBMISSION, REVIEW, AND EVALUATION OF WORKS

1. Works shall be sent to the following email: oleksiibychkov@knu.ua. Works that do not meet the requirements of the competition or are not presented in time will not be considered.

2. The competition is held in the form of two stages:

I stage– the competition commission reviews the works to determine winner candidates;

II stage – scientific and practical conference where the students present their works and the competition commission determines the winners of the competition.

3. During the first stage of the competition the competition commission shall consider the submitted scientific works and carry out their review (Addendum No. 4).

4). A single work passes a blind review by two reviewers.

4. Scientific works are not reviewed at the Universities where their authors study.

5. In accordance with the results of the review, a rating list of scientific works (hereinafter referred to as the rating list) shall be formed and published. Minutes of a meeting of the competition commission shall be prepared.

6. If during the review of a scientific work instances of academic plagiarism are detected, the competition commission shall consider this issue separately and

- either confirm the fact of academic plagiarism and remove the respective scientific work from the competition and notify the participant about this fact;

- or, not confirm the fact of academic plagiarism and allow the scientific work to continue participation in the competition.

8. On the basis of reviews, the competition commission at its meeting (where no less than 2/3s of its members should be present) shall select scientific works the authors of which are invited to the final scientific and practical conference. The decision of the competition commission is voted by the majority of its approved members. If vote counts are equal, the vote of the chairman is decisive.

9. The competition commission shall send invitations to the authors of the respective scientific works (including to the author's e-mail) to participate in the final scientific-practical conference (not later than two weeks before its date) and present the work.

10. If a candidate for award is not able to attend the final scientific and practical conference, he or she is allowed to participate with the use of telecommunications in videoconference mode.

11. In accordance with the decision of the competition commission, the final scientific and practical conference can also be held in videoconference mode.

12. Information about the date of the final scientific and practical conference, the lists of invited participants and of their scientific works, reviews of all scientific works submitted to the competition (excluding information about the reviewer), the rating list are published on the website of the competition not later than two weeks before the final the scientific-practical conference.

13. The competition commission maintains a register of student scientific works in order to eliminate the possibility that such works are re-submitted to the competition.

14. Documentation concerning the second stage of the competition is stored by the base higher education institutions for three years.

IV. SUBMISSION AND CONSIDERATION OF APPEALS

1. The appeals commission is created to ensure that the second stage of the competition is conducted objectively.

2. Representatives of universities, scientific institutions and companies (under their consent) are appointed to be the members of the appeals commission.

3. Participants of the competition can apply in writing to the appeals commission within five calendar days after the release of the rating list, if, in their opinion, their scientific work was evaluated non-objectively.

4. The appeals commission shall, within three working days from the date of receipt of an application, make a decision recorded in the minutes of a meeting of the appeals commission of the competition (Addendum 5) and shall provide it to the applicant.

V. WINNER SELECTION AND AWARD PROCEDURE

1. After the final scientific and practical conference, the competition commission summarizes the results of the second stage of the competition and selects winners of the competition: I degree - up to 20%, II degree - up to 30%, III degree - up to 50%.

An author of a scientific work who did not participate in the final scientific and practical conference cannot be a winner.

2. Scientific works of the winners of the competition shall be published on the website of the competition.

3. The competition commission shall publish the reports on the second stage of the competition, minutes of the meeting of the competition commission (Addendum 6), statistical information (Addendum 7), and copies of minutes of the appeals commission (if any) on the web site of the Competition.

4. Diplomas of winners of the Competition shall be issued and signed by the chairman of the competition commission.

5. The competition commission may issue prizes and honors in separate nominations to students.

VI. FINANCING OF THE COMPETITION

1. Material technical support of the II stage of the competition, expenses for the review process and the final scientific and practical conference shall be covered by any sources not prohibited by the legislation of Ukraine.

2. Expenses for business trips of participants of the II stage of the competition shall be covered by any sources not prohibited by the legislation of Ukraine.

Addendum 1

Formal requirements to scientific works of students

The length of the work must not exceed 30 pages (excluding appendices and the list of references), **font size 14**, Times New Roman, 1.5 line spacing.

The work must be in English.

The work must consist of:

1) *Title page* (this page is considered the first page of the work, but the page number should not be indicated on it!)

2) *Abstract* (this page is considered the second page of the work, but the page number should not be indicated on it!)

3) *Table of contents* (this page is considered the third page of the work, but the page number should not be indicated on it!)

4) The text of the work (introduction, sections, conclusion, free style)

5) List of references

6) Optional appendices.

The following documents shall accompany the work separately:

1) information about the author(s) and about the scientific supervisor.

Template of the title page

Topic of the work:

«.....»

Code: « »

Section:

Addendum 2 (example of an Abstract)

ABSTRACT (free style)

FOR EXAMPLE:

Scientific work under the code name "Evolution".

Scientific work: 28 pages, 4 figures, 7 tables, 22 sources.

The aim of the work...

The scientific novelty of the work

The practical value of the results of the work

Keywords. COMPARISON CRITERION, OPTIMIZATION,
COMPARATIVE ANALYSIS, EVOLUTIONARY METHOD.

Addendum 3

INFORMATION about the author (authors) and the scientific supervisor of the scientific work

« _____ »

Author

Scientific supervisor

1. Last name

1. Last name

2. First Name

2. First Name

3. State

3. State

4. Full name and location of the
higher education institution where the
author is enrolled

4. Place of work, telephone,
e-mail

5. Faculty (institute)

5. Position

6. Year of study

7. The results of the work are
published

(number)

8. The results of the work are
deployed

(number)

9. E-mail _____

Addendum 4

REVIEW **of the scientific work** _____ **presented to**

Criteria for evaluating student scientific works (first stage)

1. Review of the works:
2.
 - 1 Relevance to the section 5
 - 2 Presence of a scientific result 5
 - 3 Practical value 5
 - 4 The work satisfies formal requirements 5
 - 5 Plagiarism* >25% The work should be removed from the competition

No.	Characteristics and criteria for evaluating the manuscript of a scientific work. ¹	Rating. The maximum number of points (on the 100-point scale)	Points
1	Relevance of the problem	5	
2	Novelty and originality of ideas	15	
3	Presentation quality	5	
4	Theoretical scientific results	20	
5	Practical orientation of results (documents that confirm deployment of the results)	20	
6	Level of use of scientific literature and other sources of information	5	
7	Degree of independence of the work	10	
8	Quality of the report presentation and correctness and relevance of answers to questions	15	
9	Scientific publications	5	
10	Negative aspects of the work (explain the reduction of maximum points in the items 1-9):		
Total points			

General conclusion _____
(the work is recommended, not recommended to be presented at the scientific-practical conference)

Reviewer _____
(signature) (Full name, place of work, position, scientific degree)

Addendum 5

MINUTES THE MEETING of the appeals commission of the Competition on

(field of knowledge, specialty, specialization)

on _____ 20____

The appeals commission has considered the student scientific work of the student

(name, surname, patronymic)

in accordance with his (her) application from _____ 20____ and decided that the student

(surname, name, patronymic)

(the decision of the appeals commission)

Chairman of the appeals commission

(signature)

(last name, initials)

Members of the appeals commission:

(signature)

(last name, initials)

(signature)

(last name, initials)

Addendum 6

MINUTES OF THE MEETING of the competition commission of the Competition

_____ ,
held at _____ ,
(name of the base institution)

on _____ 20 ____

The competition commission has arranged the review of ____ student scientific works received from ____ higher education institutions.

At the final scientific and practical conference ____ students from ____ higher education institutions presented their works.

On the basis of reviews and evaluation of scientific reports of participants of the scientific and practical conference, the domain competition commission decided to recognize the winners of the Competition and award:

Diploma I degree, II degree, III degree (indicate the required)	Last name, first name, patronymic of the student (in full)	Last name, first name, patronymic (in full), position of the scientific supervisor	Name of the higher education institution (in full)
1	2	3	4

Chairman of the Competition commission _____
(signature) (last name and initials)

Members of the Competition commission:

_____ (signature)	_____ (last name, initials)
_____ (signature)	_____ (last name, initials)

Addendum 7

STATISTICAL INFORMATION

about the Competition 20 __/20 __

(field of knowledge, specialty, specialization)

received _____ works (_____ students - authors, _____ scientific supervisors)
from _____ higher education institutions.

No.	Name of the higher education institution (in full)	Total number of works	Number of students - authors	Awards		
				diploma of I degree	diploma of II degree	diploma of III degree
1	2	3	4	5	6	7

Chairman of the
Competition commission

(signature)

(last name, initials)

Secretary of the
Competition commission

(signature)

(last name, initials)