#### **REGULATIONS**

## on the Use of Artificial Intelligence at the National Defence University of Ukraine

### 1. General provisions

- 1.1. The Regulations on the Use of Artificial Intelligence at the National Defence University of Ukraine (hereinafter referred to as the Regulations) defines the principles, rules, and recommendations for the responsible, ethical, and safe use of artificial intelligence (hereinafter referred to as AI) at the National Defence University of Ukraine (hereinafter referred to as the NDUU).
- 1.2. The purpose of the Regulations is to create a methodological basis for the implementation and rational use of AI systems in the educational process, scientific and innovative activities, as well as in the management processes of the NDUU.
- 1.3. The Regulations aims to establish an effective, ethical, and safe environment for the use of AI systems at the NDUU, to improve the quality of education, foster innovation in research, and support the sustainable development of the NDUU.
- 1.4. The Regulations applies to all participants in the educational process of the NDUU.
- 1.5. The National Defence University of Ukraine recognises that AI is one of the key technologies of our time, which facilitates the modernisation of education and science. At the same time, the NDUU is aware of both the benefits and potential risks associated with using AI in the educational process and research.
- 1.6. The National Defence University of Ukraine promotes the responsible use of AI tools, provided that key aspects are considered, especially: information security, data confidentiality, copyright compliance, and academic integrity.
- 1.7. The position of the NDUU is not to declare general restrictions on the use of generative AI, but to emphasise the specifics of its conscious and responsible use.
- 1.8. The National Defence University of Ukraine promotes awareness of users on the use of generative AI, including seminars, training sessions, online courses, and the distribution of educational materials.

## 2. Legal framework

2.1. The Regulations are based on:

The Law of Ukraine "On Education" and "On Higher Education";

The Concept of Artificial Intelligence Development in Ukraine, approved by the Order of the Cabinet of Ministers of Ukraine No. 1556-p dated December 2, 2020:

Guidelines for the use of artificial intelligence systems in higher education institutions, approved by the Ministry of Education and Science of Ukraine on April 24, 2024.

### 3. Basic terms and concepts

#### 3.1. The following basic terms and concepts are used for the Regulations:

AI system is a computer programme that is designed to operate with different levels of autonomy and can be adaptive after deployment. It concludes how to generate outputs (predictions, content, recommendations, or decisions) that may affect a physical or virtual environment based on input received, for explicit or implicit purposes.

**Artificial intelligence** is an organized set of information technologies that can be used to perform complex tasks by using a system of scientific research methods and algorithms for processing information received or independently created during work, as well as to create and use own knowledge bases, decision-making models, algorithms for working with information and determine ways to achieve the set tasks.

Other terms and concepts in these Regulations shall have the meanings given in the applicable law.

## 4. Principles of using artificial intelligence

## 4.1. The use of AI systems in NDUU is based on the following principles:

Transparency – AI systems and their decisions should be transparent, and explained in a simple and understandable way. When using AI systems, users should be aware that they are interacting with AI and should be properly informed by the developer about the capabilities and limitations of the respective AI system and the rights of its users.

Human control – AI systems are tools that empower humans. The use of AI should involve proper human oversight, such as direct human involvement in developing, implementing, and using these systems. AI systems should support all participants in the educational process while respecting their rights and freedoms. The use of AI in the educational process should be accompanied by human involvement to ensure that decisions are justified, and ethical aspects are taken into account.

Technical reliability and security – AI systems should be stable, reliable, and safe. They should include safeguards against misuse and minimise the risk of harm. An adequate level of cybersecurity should be ensured.

Confidentiality and data management – AI systems should ensure data privacy and protection, implement appropriate data management mechanisms that meet high standards of data quality and integrity, and ensure legitimate access to data.

Diversity, non-discrimination, and equity – AI systems should prevent discrimination or unfair bias and foster an inclusive environment.

Accountability – all parties involved in developing and using AI technologies should be held accountable for implementing these principles. Mechanisms should be established to ensure that AI system developers are accountable and responsible for the outputs of using AI systems. The key role in this is played by the possibility of auditing, which allows for evaluating algorithms, data, and design processes.

Compliance with applicable laws – the use of AI systems should not lead to violations of legal norms;

Social and environmental welfare – AI systems should not allow for the hidden manipulation of human behaviour and should benefit all people, including future generations, and therefore should be developed and used in a sustainable and environmentally sound manner, and should include monitoring and evaluation of the long-term impact on individuals, society, and democracy.

## 5. Areas of application of artificial intelligence

## 5.1. Integration into the educational process in the following areas:

preparation for educational classes;

individualisation of learning and provision of personalised feedback; automated assessment and creation of test items;

creation of virtual assistants and chatbots to support participants in the educational process;

development of immersive educational environments;

application of AI in modelling and simulation of combat operations, command, and staff exercises;

support for students' self-study, search, and processing of information; learning foreign languages and working with foreign language materials; generating ideas for essays, presentations, and other creative tasks; support for inclusive education.

## 5.2. Areas of integration into research and innovation:

analysing big data, searching for patterns and correlations; generating ideas and hypotheses for research;

search for information for scientific research, prototypes, and analogues for inventions:

automation of routine tasks (formatting, bibliography, translation, preparation of scientific reports, and presentations of research results, etc;)

Optimisation of teamwork in research projects.

5.3. Integration into the management processes of the NDUU in the following areas:

automation of various document preparations; data analysis for management decision-making; optimisation of administrative processes.

### 6. Ethics of using AI

#### 6.1. General rules:

when using AI systems, it is important to be aware of their limitations. The factual accuracy of AI-generated content (fictions, distortions, biases, harmful stereotypes) should be checked;

do not rely on AI-generated content as a key or sole source;

use AI in combination with other sources of information;

do not enter personal data, confidential, secret or proprietary information into AI systems;

the tasks performed must be the result of the author's own original work;

artificial intelligence can be used as an assistant to accelerate work, but it does not replace the author's own contribution.

avoid over-reliance on AI, as it reduces opportunities to develop one's own basic and critical skills.

#### 6.2. Permissions and limits of AI use:

using AI to imitate learning or scientific work is dishonest. Using AI to produce materials that imitate an author's research to achieve quantitative indicators formally is considered an academic violation.

it is unacceptable to manipulatively formulate queries to AI in order to obtain desired answers that have no factual basis. The use of technical instructions to AI to create content that looks correct but is misleading is considered a deliberate violation of integrity;

using AI-generated materials without a clear indication of the source or substantial authorial processing constitutes academic misconduct. Using generated texts, data, or visualisations without appropriate attribution or editing that indicates the author's contribution is unacceptable;

using AI to create or disseminate falsified or fictitious data is unacceptable. Fabrication of research results using AI is a gross violation of academic standards integrity;

using AI to bypass the requirements for individuality or autonomy of work is considered a violation. This includes unauthorised collaboration, cheating, collusion, or automated preparation of answers without reflecting one's own understanding;

lack of transparency regarding the use of AI in written work is an academic violation. Students must clearly indicate the fact of the use of AI, including prompts, tools, and the degree of editing of the result;

it is permissible to use AI as a tool to support learning or research, provided that the result is critically analysed. For example, to generate ideas, explanations, structure information, or create test tasks variants;

using AI in teaching is permitted to automate routine tasks, analyse student performance, or create educational materials. The condition is the conscious use of the results and responsibility for the final outcome content;

using AI to search for scientific information, analyse large amounts of data, generate hypotheses or optimise workflow does not violate integrity if authorship is retained and appropriate references are provided;

permissions and limits for the use of AI should be clearly defined in the syllabi of academic subjects (curricula of professional development courses).

#### 6.3. Recommendations on the use of AI

For the purpose of effective, ethical and safe implementation of artificial intelligence, all participants in the educational process are recommended to:

integrate AI tools as supplementary resources into educational, methodological, administrative, or analytical activities, considering the goals of fostering critical thinking, independence, professional integrity, and analytical skills;

ensure the verification of the quality and accuracy of content used or generated by AI (texts, reports, visual materials, instructions, data), as well as compliance with ethical standards and legal norms;

avoid fully delegating AI functions while preserving the key role of human oversight, analytical judgment, and expert assessment in educational, scientific, or managerial decision-making.

promote the development of transparent rules for the use of AI in courses, projects, research, or organisational activities, including mandatory disclosure of AI use in accordance with established standards (specifying the tool, prompts, and degree of editing).

develop or perform tasks focused on the interpretation, synthesis, and resolution of non-standard situations, taking into account the limitations of generative models in the context of creativity and flexible thinking;

to increase the level of digital literacy by participating in training sessions, conferences, seminars, and other events dedicated to the ethics, risks, and potential of using AI in education and science;

to foster a culture of responsible and reflective use of AI by encouraging discussion, critical analysis of cases, mentoring, and mutual support among participants in the educational process.

#### 7. Risks and limitations

AI systems function as language models rather than knowledge repositories: their primary role is to statistically predict the most probable next word or code snippet based on patterns learned from large datasets. As a result, such tools do not have a true understanding of the content being created.

The data used to train these models is imperfect: it may contain errors, biases, and various limitations, which increases the risk of generating content that does not reflect factual information. In addition, when a user formulates an incorrect prompt, generative artificial intelligence may produce content containing potentially false or fabricated claims.

### 7.1. The main issues related to AI-generated content are:

grammatical and linguistic errors in the output. This may be caused by several factors, including limited processing of language structures, flaws in training datasets, or the high complexity of language expression. For example, the model may misuse punctuation, generate non-existent words, or construct sentences with syntactic errors;

the external validity of the outputs produced by generative AI can be deceptive. Generated code snippets, answers to questions, or calculations often appear convincing, but may contain significant errors, factual inaccuracies, or even fabricated quotes and sources that do not exist;

limited knowledge of artificial intelligence models. This is due to the fact that their data might be temporally limited or outdated, which leads to insufficient coverage of current events, not including events and changes that occurred later;

artificial intelligence models lack ethical consciousness and are therefore unable to recognise that creating content which is offensive, inaccurate, or misleading contradicts the moral and social norms accepted in human society;

risks of copyright infringement accompany the use of generative artificial intelligence, as models may reproduce fragments of texts, ideas or visual content created by humans without proper citation. This can be classified as plagiarism and may result in the misuse of legally protected materials.

compliance with information security standards is extremely important when using artificial intelligence systems, as insufficient protection of data may lead to unauthorised access or leakage. During training, models can process large amounts of confidential information, including personal, commercial and corporate data, which can be implicitly reproduced in the process of further generating answers, posing a risk of disclosure of protected information;

over-reliance on artificial intelligence to generate texts, analytical conclusions, and other tasks can inhibit the development of fundamental skills such as critical thinking, writing competence and analysis, which are important for learning and professional growth. It also poses risks to personal initiative and creativity, and may increase reliance on technology.

## 8. Training and improving AI literacy

# 8.1. Training and improving AI literacy:

It is recommended to conduct regular training activities to improve the AI literacy of participants in the educational process and research activities.

The National Defence University of Ukraine should provide informational support to promote AI literacy (educational events, roundtable discussions).

It is necessary to develop one's own competences in the field of AI for effective use of tools and adaptation of educational programmes.

- 8.1. The Regulations shall enter into force by the order of the Commandant of the National Defence University of Ukraine after their approval by the decision of the Academic Council of the NDUU.
- 8.2. The Regulations are approved by the decision of the Academic Council of the NDUU and enter into force by the order of the Commandant of the National Defence University of Ukraine.
- 8.3. Amendments and additions to the Regulations shall be made by the decision of the Academic Council of the NDUU and shall enter into force by the order of the Commandant of the National Defence University of Ukraine.

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