

The Guidelines on Artificial Intelligence Usage at Vilnius University

Purpose of the Guidelines

The purpose of these Guidelines on Artificial Intelligence Usage at Vilnius University (hereinafter the 'Guidelines') is to provide recommendations on the appropriate use of artificial intelligence (hereinafter the 'AI') tools in research as well as teaching and learning activities in order to avoid breaches of academic ethics and copyright laws as well as the disclosure of personal or confidential information.

Artificial Intelligence and Generative AI Models

Artificial intelligence is an area of technology that develops computer algorithms capable of performing tasks that usually require human intelligence. These include, but are not limited to, language comprehension, learning (training), problem solving, identification or decision making. AI algorithms are trained using large amounts of data and a variety of training strategies to recognise patterns, speak, evaluate, etc.

Generative AI models are a category of AI models that not only analyse and interpret data but are also capable of generating new data similar to the one that has been learned. These models are trained using statistical methods such as artificial neural networks to understand and replicate data structures. Both areas are part of a broad and rapidly evolving field of research and technology application. It is clear that AI and generative models are constantly evolving as researchers and engineers improve training methods and algorithms.

Technological advances allow AI generative models to be integrated into applications ranging from mobile apps to complex research systems. This integration makes applications more efficient; however, it also raises various security and ethical issues.

Using Generative AI Models in the Study Process

Generative AI models can be useful for learning and teaching at a university. They can help lecturers save time when preparing for teaching and learning activities (e.g. preparing illustrations, tables, slides, practical assignments, generating ideas, adapting assignments to individual student needs, etc.). They can help students to learn better (e.g. explain complex concepts, understand the wider context, answer questions that arise, etc.) and to complete assignments better and faster (e.g. improve their writing style, provide feedback on completed assignments, generate initial ideas for a draft, etc.). Simultaneously, generative AI models pose a number of challenges and risks related to the safe and transparent use of data, potential fallacies or biases and academic ethics.

In the study process, generative AI models are typically used for the following purposes:

- 1) **personalising teaching and learning** – generative AI models can create customised teaching and learning materials according to the learner's learning style, level, and areas of interest.
- 2) **interactive assignments and simulations** – generative AI models can generate interactive assignments and simulations that help learners better understand complex concepts.

In order to use such models and programmes ethically and effectively, it is important that all parties concerned adhere to the following principles in their activities.

Users' Responsibilities

1. The person publishing or using the results generated by a generative AI model is responsible for the content and quality of the final result. It is to be noted that the content generated by AI may be inaccurate, misleading or untrue and may infringe the intellectual property, personal data or other protected rights of third parties. For this reason, any result generated by assistance tools must be reviewed and verified, and transparency requires disclosure of the use of AI.

2. The use of generative AI models for preparing research, papers, applications, etc. must be explicitly stated (in the introduction of the paper, in the description of the research methodology, or in the declaration on the use of generative AI models in an annex to the paper). The use of generative AI models must be disclosed to the research team and/or partners, with clear rules on their use, the formats, the data to be used, and other relevant issues.

3. It is recommended that the results generated by the generative AI models are retained in their entirety, including the pathway used to generate them, the generative AI model used, and the date of its use.

Administration's Responsibilities:

1. ensuring that the relevant documents (methodological guidelines for papers at the CAU, evaluation criteria, etc.) are updated to define the norms for the use of AI and generative AI models in the study process and the cases where the use of such tools is prohibited, taking into account the nature and the need of study programmes;

2. developing recommendations for a declaration on the use of AI in papers, taking into account the specificities and needs of study programmes;

3. providing ongoing assistance and support to lecturers and students on AI issues by organising periodic competency development events;

4. providing ongoing support to students, lecturers, and members of the Academic Ethics Commission in identifying cases of abuse and applying appropriate sanctions (e.g. the use of plagiarism detection systems, assistance in detecting AI-generated text according to possible indicators: a) the text has no references to sources or the referenced sources are non-existent; b) the text uses information that is obviously outdated, includes factual errors; c) the text is uncharacteristically correct and fluent, but the analysis is superficial and ideas are repetitive.)

Lecturers' Responsibilities:

1. updating course unit programmes, competencies to be developed and examination requirements in line with the rapid evolution of AI. It is recommended to review the existing examination and evaluation strategies used so far to see how well the AI programs are able to perform the assignments of the course unit, and to adapt and modify them if necessary (e.g. using oral answering strategies for certain assignments or closed-book examination strategies, distributing assignments over time and tracking student progress, etc.);

2. discussing with students the ethical and effective use of generative AI applications in the learning process of the course unit (module);

3. should the use of generative AI models be permitted, responsibly informing, sharing, and discussing with students the fact that AI has been used to create assignments or other materials;

4. in case of questions about ethical use, addressing the administration (Head of Studies or Vice-Dean for Studies) or the Academic Ethics Commission of the unit;

5. not using generative AI models for reviewing theses. While recognising that these applications could be useful in reviewing certain technical aspects of the thesis (e.g. citation, word count, use of terms, etc.), the risk of error is considered to be too high, in particular because current generative

AI models have difficulty in identifying the novelty, scientific validity, innovativeness, originality, etc. of a thesis).

Students' Responsibilities:

1. familiarising themselves with the Code of Academic Ethics of Vilnius University as well as the documents regulating the use of AI and generative AI models at the University, and using generative AI models responsibly and ethically;
2. should the use of AI and generative AI models in the study process be permitted, disclosing the fact of such use;
3. in case of any questions about ethical use, consulting a course unit (module) lecturer or the supervisor of their paper;
4. complying with the requirements for citing AI and declaring the use of AI in papers, as described in the Guidelines, the CAU methodological instructions and the requirements provided by the lecturer.

Academic Ethics and Authorship

AI should be used responsibly, with respect for personal data, in a non-discriminatory manner and in a way that promotes fairness and transparency.

At the University, a paper or an article must be prepared by a student or an academic employee themselves in accordance with the requirements set out in the legislation, and non-compliance with this principle is considered a possible violation of the Code of Academic Ethics of Vilnius University, as it violates the principle of academic integrity, and such a violation may be appealed to the academic ethics commissions in accordance with the procedure set out in legislation. Generative AI models or any other AI models shall not be considered as authors or co-authors, and therefore AI should not be credited as an author or co-author of a text (e.g. a thesis, a research article or other academic publication) or other work. Only a human being can be the author of a paper.

The use of a generative AI model must be disclosed; therefore, if a generative AI model has been used in a text or other paper, it must be clearly indicated (with appropriate citation and/or a declaration on the use of a generative AI model). Failure to disclose the use of a generative AI model in academic work would constitute academic dishonesty.

When developing content using a generative AI model, questions may arise regarding the extent to which the outcome produced by the model is determined by the contribution of specific identifiable people. These cases will have to be dealt with on a case-by-case basis, but it is suggested to be taken into account that if it is established that people's contributions do not have any direct link to the expression of the outcome (e.g. limited to a general instruction to generate a certain type of work), they could not be regarded as authors of the outcome. On the other hand, the expression of the author's (individual's) creativity may be not only in the content created but also in the selection or arrangement/structuring of such content. In the latter case, the authorship of the set of content generated by AI could belong to the person(s) who made the selection and/or arrangement.

Citation

Using AI-generated text or a paraphrase thereof, this content should be identified and cited in a similar way to that of citing a text of another author. The following are examples of citations; however, it is important to note that different disciplines use different citation styles; therefore, these examples should be adapted accordingly.

Example 1 of Citation. The text, generated by AI in response to a prompt 'What is ChatGPT?', states that it is 'one of the most advanced language models that can understand and generate natural

language in an attempt to perform specific tasks or provide communication support to users' (OpenAI, 2023; see transcript in the annex).

If the content generated by AI is paraphrased, the reference to the AI tool shall also be provided in the same way as when using ideas of another author:

Example 2 of Citation OpenAI (2023) provides a response that *ChatGPT* is one of the most advanced language models.

In cases where only part of the larger text that a generative AI model generates in response to a prompt is used in the work, the full generated text should be included in the annexes to the paper. The full generated text is important because generative AI models generate unique answers each time; therefore, even if the same query is submitted again, the generated text will be different. In this case, it is sufficient to refer to the full text in the annex and to describe it in a summarising way, as in the examples above.

The use of the content produced by AI tools must also be described in the reference list: the organisation that developed the tool, the date of creation of the text, the name of the tool and the website address shall be indicated.

Example of a reference in the list of sources used. Author. (Date). Tool name (Version of the tool) [Large Language Model]. URL

OpenAI. (2023). *ChatGPT* (query of 6 September) [Large Language Model]. <https://chat.openai.com/chat>

Usage in Scientific Publications

The use of generative AI models in scientific publications is to be decided by the researchers themselves in accordance with the norms of academic ethics and the rules or policies of the publisher or the funder. In some cases, the use of such tools is prohibited; therefore, it is important to follow the rules or recommendations set by the publisher.

Data Security

The use of AI tools is associated with cyber threats such as data leakage, disclosure of personal data, misrepresentation of information, or other potential threats. In order to preserve data security, confidential data and/or information, including but not limited to personal data, original ideas of others, financial, third party or other sensitive information, as well as unpublished research data, must not be uploaded to generative AI models. Generative AI models do not guarantee the security of this data, which could lead to its disclosure and/or accessibility to third parties, infringing personal data, the intellectual property rights of individuals, or their ability to seek protection (e.g. patentability).
