

University of Tartu guidelines for using AI chatbots for teaching and studies

Version 1, 28 April 2023

The senate and the Rector's Office discussed and supported the introduction of the guidelines at their regular meetings on 28 April and 2 May 2023, respectively.

Large language model-based chatbots, including ChatGPT, have changed the perception of text creation over the last year. Moreover, they have led to a debate about how to learn and teach at the university, which skills are becoming obsolete, and what new skills are needed to keep up. As long as we teach and assess skills in which artificial intelligence (AI) chatbots are (at times seemingly) much faster and more successful than humans, we must also think of how to avoid academic fraud.

These guidelines were developed by a working group¹ in April 2023, drawing on various sources, who laid down general principles and specific instructions on using AI chatbots in teaching and studies. Since the world and our understanding of it are evolving rapidly, these guidelines are a preliminary agreement that may be influenced, for example, by national restrictions arising from data protection.

1. General principles

- 1) The university encourages the use of AI chatbots to support teaching and learning and develop students' learning and working skills. The key aspects of using them are purposefulness, ethics, transparency, and critical approach.
- 2) In the context of a particular course, the lecturer has the right to decide how to use an AI chatbot or, if necessary, limit its use. The instructions can be included in the course version information. If there are no instructions, the use of chatbots is treated as outside assistance used by the student.
- 3) In the case of a written work, the use of an AI chatbot must be properly described and referenced. Submitting a text created by a chatbot under one's name is academic fraud.
- 4) Personal data must not be entered in a chatbot without the person's consent.

2. What is an AI chatbot, and how to use it?

The development of artificial intelligence (AI) has led to generative systems that can create text, images or other media so well that it can be difficult to distinguish the result from human-generated content. These guidelines focus on text-generating systems, including GPT-3.5 and GPT-4 developed by

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OpenAI and LLaMA by Meta, and other similar systems. Large language models are often used as chatbots; for example, ChatGPT is based on GPT (generative pre-trained transformer) language models. AI chatbots have a very high level of generalisation ability: they can handle many tasks and can be used to create text.

When using a chatbot, the conversation starts with the user entering a prompt, which can be a question or request. To ensure a better result, it is useful to provide additional information and context with the question or request. The AI chatbot then provides a text output that can be used to continue the dialogue and ask further questions.

Although the output provided by an AI chatbot may seem meaningful and logical at first glance, it may contain errors. The chatbot may cite fictional sources, make errors in logic, formatting, calculating and grammar, and give biased responses that do not consider cultural differences or social norms. The generated text may disregard data protection regulations and contain false personal information. The presented facts and source references must therefore be checked. The responsibility for using the AI chatbot output rests with the user, who must have the necessary knowledge to evaluate the output.

3. Using AI chatbots in learning and teaching

An AI chatbot could be compared to a companion who can be asked for advice anytime. However, it should be kept in mind that it is not human and cannot replace expert advice.

As with calculators, spell-checking and language-editing tools, search engines, and other similar tools, there is generally no point in prohibiting AI chatbots. Rather, one should consider how to learn to use them in a purposeful, ethical and critical manner.

By deliberately planning assignments that must be carried out with the help of a chatbot, it is possible to practice general skills, such as critical thinking, making queries and information evaluation, problem-solving and digital skills.

If a lecturer allows and encourages the use of chatbots or other AI-based software in their course, they need to consider whether students have access to these tools. Students cannot be obliged to use a tool that requires them to create an account with their personal email address. The differences between the free and paid versions of AI chatbots must also be considered.

AI chatbots can be used to support one's studies, for example,

- when doing independent work, to get explanations of concepts, find ideas, improve text, or ask self-check questions;
- to overcome writer's block or the so-called fear of the blank page;
- as a brainstorming assistant;
- as a programming aid;
- for editing and translating texts;

- for developing critical thinking by evaluating the output of the AI chatbot;
- to get a general overview of a large amount of material.

Lecturers can use the AI chatbot for preparing for and planning their lessons, to facilitate their work and develop students' skills. For example, it may help them save time when:

- creating and modifying teaching materials and presentations (adapting complex texts, providing examples appropriate to the specialisation, etc.);
- drafting questions for a test paper, exam or self-check.

It is possible to develop students' skills, for example, with assignments which they need to complete with the help of an AI chatbot. What matters is not the end result, but the process, incl. writing effective prompts, evaluating the output, and holding a dialogue. Learners may also be asked to find an answer to a question of their choice with the help of the AI chatbot, and have them write an analysis of the response.

If the lecturer wants to restrict the use of chatbots, it is possible to

- give an oral exam or a written exam with pen and paper in the classroom;
- give a written exam in the computer classroom with the Safe Exam Browser program in Moodle, setting it up so that no other applications or browser windows can be opened during the exam;
- in the case of written assignments, reduce the proportion of essay-type tasks in the final grade, change the requirements for writing the essay, such as ask the student to write about their own experience, opinions, personal relation to the specific material or data, or the Estonian context;
- create tasks that require collecting original data by means of interviews, observation, fieldwork, archive study, or other methods, and analysing the data;
- use online tests for learners' self-check rather than for assessment, and reduce their weight in the final assessment.

If the use of AI chatbots in a course or for assessment is prohibited, it should be clearly stated.

Students can be informed of the restrictions as follows.

- The use of ChatGPT or any other AI-based software is not allowed in the course/quiz/test/exam.
- Before you start completing the course assignments with the help of a fellow student or an AI chatbot (e.g. ChatGPT), please ask for my permission.
- If you use an AI chatbot in a course where it is not allowed, or do not refer properly to its use, it is academic fraud, which will be dealt with in the same way as other cases of academic fraud.

Detecting the use of an AI chatbot can be difficult. At the time of completing these guidelines, the University of Tartu is testing Turnitin, a new plagiarism detection software that aims to distinguish between AI- and human-generated texts.

ChatGPT has given the following recommendation: "Use ChatGPT only as a tool and always use other sources to verify the information obtained. ChatGPT is intended to assist and to expand knowledge and

should not be the sole source for making decisions.” (OpenAI 2023, personal communication, 23 April 2023).

4. Citing an AI chatbot

An AI chatbot is not the (co-)author of a text but rather a tool that can be used to compose a text. Using an AI chatbot or other AI application to an unjustified extent² or without reference constitutes academic fraud (see <https://ut.ee/en/content/academic-fraud>).

When an AI chatbot is used when writing an article or thesis, the author must explain how it was used in the methodology chapter: for example, describe what questions were asked, what was the output obtained from the model, and to what extent it was modified (example 1). The specific use can also be described within the text. The full texts of the obtained output may be included in an appendix of the paper (example 2). A description of using the AI chatbot should unambiguously reveal to what extent and in what way it has been applied in the work.

Example 1. *In the course of writing this paper, I used ChatGPT to gather ideas / edit the text. The following prompts were input into the AI chatbot: “[---]”. The output received was as follows: “[---]”. I modified the output as follows: [---].*

Example 2. *The following definition is based on ChatGPT’s response given on 22 April 2023 to the question “What is a language model?”. The result was as follows: “[---]” (OpenAI, 2023; see full text in Appendix X).*

In-text citation depends on the specific referencing style used by the academic unit or journal (APA, Chicago, MLA, etc.). In some cases, it is recommended to refer to the use of an AI chatbot as a form of communication (example 3), since a chatbot is not a published source but rather a text generation model that can provide different responses depending on the communication situation.

Example 3. *I used ChatGPT (OpenAI, personal communication, 28 April 2023) in my home assignment to get ideas for developing the customer service. ChatGPT is an AI-driven text generator developed by OpenAI (2023).*

The **list of references** should indicate the

- creator of the AI chatbot;
- year of the chatbot version used;
- specific chatbot and its version;

² Kelli, Värvi, Ristikivi and Lepik wrote in their article “[Students and Copyright](#)”, published in Juridica no. 2020/5, that the Copyright Act allows citing a work if it does not exceed that justified by the purpose. “There is no unambiguous answer to what “justified by the purpose” means; it must be assessed in the light of the circumstances of a particular case, according to what is justified to achieve the aim of citing. Citing a large part of a work or entire work is usually deemed reproduction (copying) of the work, which does not fall under the exception for citing.”

- type or description of the language model used;
- web address of the chatbot.

For example: *OpenAI. (2022). ChatGPT (Dec 20 version)*, large language model, <https://chat.openai.com/>.

5. Sources and further reading

ChatGPT

- [ChatGPT website](#)
- [OpenAI: Educator considerations for ChatGPT](#)

University of Tartu seminars (in Estonian)

- [“Kuidas ChatGPT õppimist ja õpetamist muudab I”](#)
- [“Kuidas ChatGPT õppimist ja õpetamist muudab II”](#)

Universities’ guidance on using AI

- [University of Yale](#)
- [University of Helsinki](#)
- [Technical University of Munich](#) (examples for using ChatGPT in university teaching on p 12)
- [University College London](#)

Citing AI chatbots

- [APA Style Guide](#)
- [University of Queensland’s referencing guide](#)

Official guidelines

- [European Commission, Ethical guidelines on the use of artificial intelligence \(AI\) and data in teaching and learning for educators](#)
- [Ministry of Education and Research, guidelines on the use of chatbots in education \(in Estonian\)](#)