Guideline for dealing with generative AI systems

RE-R27-E

CUAS

Version 1

22.01.2025

Version	*Changed pages*	*Type of change*	*Date*	*Release*
1	-	New version based on the previous recommendation for dealing with generative AI systems (RE-S01)	22.01.2025	Rectorate

I. Purpose and scope of application

These recommendations serve to summarize the current status of the use of generative AI systems at Carinthia University of Applied Sciences (CUAS) and to provide orientation, especially for teachers, researchers and employees in administration and service areas, but also for students, on how generative AI can offer added value in the university context.

II. Applicable documents and general conditions

Universities of Applied Sciences Act - FHG
Copyright Act - UrhG
RE-R03 Study and examination regulations
RE-R21-E Copyright principles in teaching and research
RE-R14 Good scientific practice
BDK-S01 Data protection training
StG-F23-E Template for an affidavit (declaration of originality)

III. Responsible body / function

Rectorate

IV. Terms and abbreviations

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V. Publication

Intranet: QM-Library

CONTENT OF THE DIRECTIVE

1 Introduction

The use of generative AI systems at universities is characterized by a highly dynamic and fast-paced environment. This guideline is intended to provide orientation and raise awareness in dealing with generative AI at Carinthia University of Applied Sciences (CUAS) by providing basic organizational, technical, legal and ethical classifications of the use of generative AI in teaching, research and administration at CUAS.

It should be explicitly mentioned that the guideline reflects the state of knowledge at the time the guideline version was released. Further input from the AI working group (ai@fh-kaernten.at) can be found at regular intervals in the "AI Updates" (available on the Intranet in the Digital Office service area).

1.1 How generative AI systems work

In generative AI systems, in simplified terms, a "model" is created as part of a multi-stage development process, which is then trained using data or interactions. Based on millions of documents or past input (prompts), syllable sequences are generated that are based on statistical probability calculations in order to simulate a human-like dialog. *ChatGPT* as a prominent representative of generative AI is a user interface for the language model GPT (GPT = Generative Pre-trained Transformer). These language models are not knowledge models and are therefore not trained to give correct answers and are only based on information up to the corresponding training date of the respective model (for example, the *ChatGPT* model 4 integrates data up to September 2023)

2 Tools and licenses

The two tools supported by CUAS (*Academic AI* and *Microsoft Copilot*) are presented below. It should be noted that all other AI tools have not been checked by CUAS for conformity with the legal regulations applicable in Austria. It is therefore the responsibility of all employees and students of CUAS to be sensitive and careful when using AI tools. Information on relevant legal aspects in general can be found in section 5 of this guideline.

2.1 Academic AI

CUAS provides **all employees of CUAS with *Academic AI***, a **university-wide AI license** via the company ACOMarket. *Academic AI* was set up in compliance with the GDPR. This means that input and output data (e.g., prompts or uploaded files) remain on a separate instance of Microsoft Azure on a secure CUAS server. The chat history can only be viewed by the respective user - even

administrators do not have access to it. However, administrators will be able to view evaluations of monthly credit consumption and the percentage of models used. If users have technical questions about *Academic AI*, they can contact the ICT helpdesk (accessible via CUAS intranet). Based upon the points mentioned above, CUAS recommends *Academic AI* as the primary tool for the secure application of generative AI at CUAS.

2.1.1 Access & use of Academic AI

Every employee automatically receives access to the internal AI tool, which can be accessed via the following **link:** https://fh-kaernten.academic-ai.at/. To log in to *Academic AI*, users are redirected to an authentication page of CUAS, where they identify themselves locally with their CUAS account username and password. After a successful authentication, they are redirected back to *Academic AI* (authentication via Shibboleth)

The *Academic AI* interface is designed to be as user-oriented as possible and is similar to the common *ChatGPT* model of OpenAI. At the time of publication of the AI guideline, *Academic AI* offers a choice of two modules (note: further features will follow gradually via the service provider ACOMarket):

1. **General ChatBot**: The chatbot can be used to write a prompt or several prompt entries easily and in different languages (voice quality may be limited depending on the language selected). You can choose between the GPT models 4o, 4 Turbo or 3.5 Turbo in the settings. The level of creativity of the response can also be customized.
2. **Document Analyzer**: In the document analysis module, one document per query can be analyzed using AI. Possible file formats are PDF, DOCX, PPTX or XLSX (max. 50MB, 300 pages or 1000 * 1000 cells). The GPT models mentioned in the general chatbot as well as the creativity level are also available for AI-supported document analysis.

Each user receives a **freely available credit of € 20 per month** with which the AI tool can be used without restriction. Depending on the scope and complexity of the prompt input in *Academic AI*, different amounts of credit are used (e.g., a simple query with the selectable GPT-4o only uses € 0.01-0.02 of the available monthly credit). Every user can view the credit currently available in their own account at any time.

2.2 Microsoft Copilot

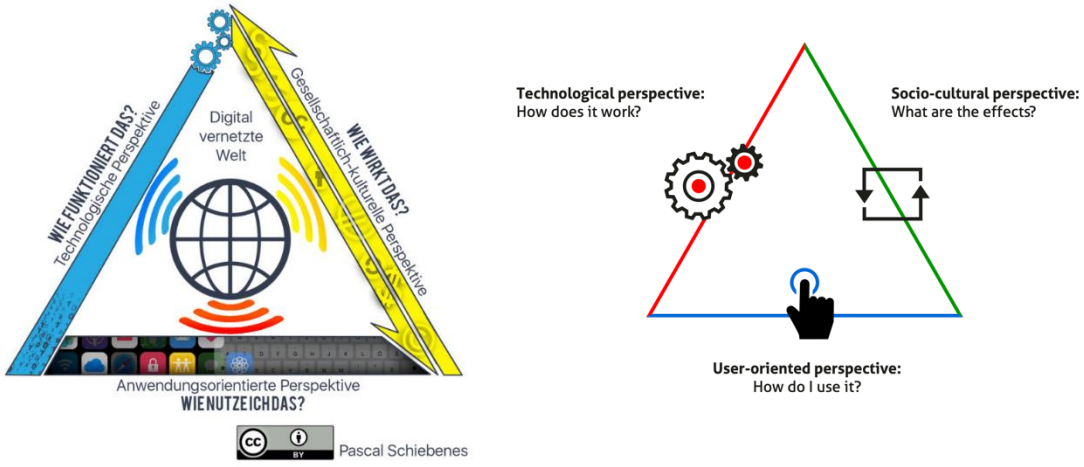
In addition to *Academic AI*, all members of CUAS (both employees and students) can use the free AI tool *Copilot* from Microsoft. *Copilot* is available via the Edge browser at https://copilot.microsoft.com/ and via Microsoft 365 in the Edge browser for all Microsoft Office products (Word, PowerPoint, Excel, etc. in M365). *Microsoft Copilot*'s chatbot uses the currently

available language models, includes source information and includes the "Visual Creator" function for image generation. According to Microsoft, personal and company data are protected. The data entered in *Microsoft Copilot* must comply with the data protection and copyright conditions mentioned in point 5 of this policy. Responsible use is assumed for each individual.

3 Didactic aspects and possible uses

Against the backdrop of disruptive technologies such as AI, faculty, staff, researchers and students are called upon to make scientifically and didactically sound decisions about how teaching and learning processes are designed. Although AI brings with it many challenges, it also opens up new opportunities for teachers and students in terms of promoting (inter)disciplinary skills and a focus on reflection, exchange and personal development. The use of AI offers the potential to promote media literacy and computer literacy among students and teachers and to encourage critical thinking.

The so-called " Dagstuhl Triangle " is a didactic model that deals with 3 perspectives of digital education.



Graphic of the Dagstuhl Triangle by Pascal Schiebenes (CC BY 4.0) (German)
English graphic created by Renate Salzmann on behalf of Beat Döbeli Honegger and is under a CC-BY-SA license.

- *Technological*: asks how the systems work
- *Socio-cultural:* deals with the interactions of the digitally networked world with individuals and society
- *User-oriented*: asks how and why tools are chosen and used

The examination of these perspectives both in self-study and in discussions with colleagues and students makes it possible to reflect in depth on the use of AI tools in a digitally networked world.

It should be emphasized once again that **generative AI models** are **not knowledge models.** The person using the tool is responsible for the results and for ensuring the accuracy of the output. Therefore, generative AI systems should always be used with caution. Limitations of generative AI include the reliability of correct information (e.g., due to incorrect information or the invention of source references) or the reproduction of biases (e.g., due to generally non-neutral, culturally biased training data sets due to missing gender formulations and other factors).
It is recommended to discuss possible limitations and problems that may arise when using AI with colleagues and students.

3.1 AI and learning

After taking legal aspects into account, AI tools can also offer some advantages for students, such as

- the use of chatbots to support learning
- supporting brainstorming
- help with structuring texts
- generating ideas and release writer's block
- researching information in self-study
- explaining solutions.

Some use cases for students are available in this series of articles from Harvard Business Publishing.

3.2 AI and teaching

Taking into account legal aspects and with reference to their own specialist expertise, AI tools can provide support in areas such as

- the creation of multiple choice tasks
- the formulation of learning objectives
- the generation of (course) descriptions
- discussions with students based on the information provided by the AI (e.g., truthfulness)
- the promotion of media skills among teachers and students.

In order to integrate AI tools into teaching, teachers can explain to students what AI tools are used for in the respective teaching format and how this relates to the learning objectives. Teachers should redesign their didactic methods to include generative AI and define this openly

with students using "Rules for Tools" (see Christian Spannagel, October 1, 2023). The "Rules for Tools" can also be developed together with students during the course. In addition, a written agreement can be presented to the students to sign to ensure compliance. This can implicitly ensure that students use AI tools more consciously and responsibly.

3.3 AI and testing

It is recommended that the examination questions and methodology be reviewed with regard to the possible use of AI and, if necessary, adapted so that the answers cannot simply be answered by AI-tools (prompts). For example:

- formulate competence-oriented tasks that cannot be solved by AI tools
- written performance is reviewed with the help of personal interviews
- written examinations can be supplemented or replaced by oral examinations
- deliberately focusing on reflection and the process of learning/working (e.g., process orientation for final theses).

As before, summative exams can be taken on campus via Safe Exam Browser (BYOD or in the IT rooms).

3.4 Scientific work in the context of teaching

Generative AI systems are aids, but ones whose use - according to a valid affidavit - must be disclosed. It must therefore be disclosed what the AI was used for and which prompts were used to obtain the results. Details on and citation methods can be found under point 5.1.3 (Academic honesty).

Martine Peters (Harvard Business Publishing, last accessed 10/16/2023) has defined 5 Aspects of Academic Honesty:

- *Discuss the aspect of academic honesty openly with the students.*
- *Act as a role model for scientific integrity yourself.*
- *Teach students the necessary skills to avoid plagiarism.*
- *Plan your course units accordingly.*
- *Check your students' work and discuss any plagiarism and the use of unauthorized aids with them.*

For teaching, the focus should be on the acquisition of skills and critical thinking (keyword: "AI literacy"). The aim of using AI in teaching is to create reflective learners. They should therefore be made aware of the following limitations in its use:

- If the inputs to the AI tool are made with minimal effort, then low quality results are generated. Prompts need to be refined to achieve good results. This requires work.
- Persons should not rely on what the program says. If the AI tool provides a number or a fact, it should be assumed that it is wrong unless the answer is known or can be checked with another source. Everyone is responsible for any mistakes the tool makes.
- Careful consideration should be given to when this tool is useful. It should not be used if it is not appropriate for the case or circumstances (keyword: plagiarism).

3.5 Helpful and interesting links

In a comprehensive OER document from the University of Vienna (*Guidelines of the University of Vienna for dealing with artificial intelligence (AI) in teaching* (2nd edition 2024)), practical tips on topics such as prompting, possible uses in courses, testing and academic writing are provided. Please also refer to the BMBWF's[1] information: Dealing with artificial intelligence in the education system (bmbwf.gv.at). Further useful information on generative AI and AI tools can be found at regular intervals in the "AI Updates" of the CUAS's AI working group.

4 AI in the context of research

The use of generative AI systems also offers the field of research new possibilities in the context of scientific work. The following application scenarios are conceivable:

- Support in the generation of research ideas
- Support in the preparation of research proposals
- Support in writing scientific texts
- Support with structuring data

In any case, it should be noted in the context of research that generative AI is not neutral, but rather reproduces content based on its training data. This basic characteristic of AI gives rise to a number of issues that should be considered for the future use of AI in the multidisciplinary research landscape of CUAS. In this context, it should be noted that the legal (see Chapter 5 below) and technical (see Chapter 1.1 and Chapter 2) aspects also apply equally to the field of research.

[1] Austrian Federal Ministry of Education, Science and Research

5 Legal aspects

At the European level, the **AI Act** came into force on August 2, 2024. From this date onwards, various obligations must be implemented by different stakeholders in accordance with the deadlines provided for this purpose. Regulations at the EU level are also expected in 2025, which will also be relevant - at least in part - for the CUAS. For CUAS, this means among other things, that it must be ensured by the end of 2025 that all employees involved in the use of generative AI also have AI expertise.

Apart from this, the **general non-AI-specific legal regulations** always apply when using AI tools**, in particular the applicable academic studies law/regulations at CUAS, data protection and copyright law**. In addition, providers of AI tools have usually published terms of use that apply to their use. These must always be observed and critically reviewed.

5.1 Implications for academic studies law

5.1.1 Integration into courses

The decision to use generative AI as part of a course or module (assignments, group work, examinations, etc.) is generally the responsibility of the course instructor and offers both the course instructor and the students the opportunity to familiarize, explore and critically reflect on the possibilities and limitations of the respective tool in a transparent manner. If use is not permitted for learning activities within the course, students must be informed of this at the beginning of the course and the decision must be clearly explained

When using generative AI in the context of courses or modules, it is also advisable to review tasks with regard to the acquisition of skills and to adapt them if necessary (e.g., with regard to their complexity). Conversely, it is recommended **to refrain from the mandatory use of generative AI for various legal reasons**.

5.1.2 Use during exams

In accordance with § 13 para. 4 FHG[2] in conjunction with point III of the current examination regulations of CUAS, students must be informed of the specific examination modalities (content, methods, assessment criteria and assessment standards) and repetition options for each course in a suitable manner at the beginning of each course or earlier. In this context, **the specific content-related, methodological and organizational modalities** of a course or module (in particular content, methods, weighting, assessment criteria and standards and aids permitted in the examination) must be outlined in the course syllabus, based on the module handbook.

[2] FHG - Fachhochschulgesetz - the "University of Applied Sciences Act"

The decision as to which aids are permitted is the responsibility of the course instructor. Accordingly, it is also up to them to decide whether or not **generative AI** is permitted **as an aid** in the course or the module. The decision should be based on considerations regarding the skills acquisition to be achieved by the students, but also in connection with the principle of equal treatment of all students (e.g., do all students have the necessary resources to use generative AI as a permitted tool or are there concerns among students about using generative AI).

If, for example, the course instructor recognizes the AI tool *ChatGPT* as a permitted aid in the context of an examination, this must be communicated to the students in good time. If this is not explicitly recognized as a permitted aid, its use in the examination is of course not permitted. If it transpires that unauthorized aids have been used, a grade of "fail" is to be awarded in accordance with point VIII of the examination regulations or an assessment that has already taken place is to be declared invalid in accordance with § 20 FHG (see also point 5.1.3)

5.1.3 Academic integrity

In an amendment to the Higher Education Quality Assurance Act (HS-QSG), a provision on **integrity in academic and artistic study, teaching and research activities** was included taking effect from July 1, 2024 onwards. Exemplary forms of academic misconduct are listed in § 2a para. 3 HS-QSG. In addition to plagiarism, the falsification or invention of data and results and the obstruction of the research of others, the use of unauthorized aids such as the **misuse of AI applications** is included as well. CUAS must specify this provision in a separate part of the statutes by August 2025

According to point VIII of the current examination regulations of CUAS, examinations and academic work are to be assessed as "insufficient" (YOU USE 'FAIL' in 5.1.2 - If it transpires that unauthorized aids have been used, a grade of "fail" is to be awarded in accordance with point VIII) if unauthorized aids have been used or plagiarism has occurred.

The use of generative AI is to be regarded as a (permitted or unauthorized) aid both in examinations and in final theses (Bachelor or Master theses).

If used in the context of final theses, these uses of AI must be disclosed and labeled accordingly by the students in a comprehensible manner. In this context, students must be informed about the form in which they must identify the use of generative AI in their thesis.

For example, AI could be declared as an aid:

Software. (Date of creation) [Response from [name of AI tool] to. . . [prompt used]]. URL.
e.g. OpenAI. (10.01.2025). [Response from Academic AI to a prompt about legal requirements].

https://fh-kaernten.academic-ai.at/

The corresponding **procedure specific to the school or degree program in regards to AI as a permitted aid must be** defined **within the framework of the respective citation guidelines**. Subsequently, students confirm with their signature on the "Affidavit" that the submitted work was written independently and without outside help and has not yet been submitted elsewhere for examination purposes, and that no sources or aids other than those specified were used (see point XIV/A/12 Examination Regulations). The current version of an affidavit can be found in the QM Library

5.1.4 Plagiarism detection via Turnitin

At CUAS, the software *Turnitin* is for the plagiarism check in Moodle. This compares the work with internet sources as well as with other works. The result of the plagiarism check must nevertheless be checked by the supervisors and does not replace the expert assessment of the respective persons!

An AI check is currently NOT carried out, as the number of false positives (incorrectly stating that generative AI was (not) used) is very high and therefore the certainty of results cannot be guaranteed. Since every query creates a new result, an AI check is not meaningful.

5.2 Copyright implications

When using generative AI, the current legal situation under copyright law must always be taken into account. Accordingly, authors (i.e., the persons who created the work) are generally the owners of all acts of use and exploitation under copyright law, such as reproduction and making available on the internet. Therefore, if copyrighted works are entered into an AI tool, care must be taken to ensure that the consent of the author or the respective rights holder has been obtained or that legal permission has been granted. General information on copyrights can be found in guideline RE-R21 "Copyright principles in teaching and research".
Conversely, works created by an AI are generally not protected by copyright. This also means that the AI provider has no rights of use and exploitation. However, it is possible that an input into an AI tool (prompt) is itself already protected by copyright if it is creative and has reached a certain level of creativity.

In addition, the training data required for the development of an AI tool may be protected by copyright. The extent to which these data can be used without the consent of the respective authors is a decision to be made on a case-by-case basis, which is why it is recommended in any

case to check a text generated by the AI not only for correctness of content with the help of other sources, but also with regard to compliance with copyright regulations.

5.3 Data protection implications

The use of generative AI must also be assessed taking data protection into account. Under data protection law, people (natural persons) are protected against unauthorized processing of their personal data. Personal data includes, for example, a student's name, date of birth and matriculation number, but also data that allows conclusions to be drawn about a specific person so that they can be identified. Please refer to the data protection training video (BDK-S01) for information on the general provisions of data protection and the definition of personal data as well as the legal basis for the lawful processing of such data.

AI tools are often offered by companies outside the European Union. Caution is required here, as the personal data is often transferred to third countries (e.g., the USA), which do not have an equally adequate level of data protection (at least from a European perspective). Such transfers are subject to particularly strict requirements to ensure that the data is protected even if lower standards prevail. In addition, the default settings of AI providers should be reviewed to ensure, for example, that the data entered and the chat history are not stored permanently.

In principle, therefore, no personal data should be entered in AI tools. There is simply no legal basis that would permit this input. If a personal reference cannot be ruled out with certainty or personally identifiable user accounts are created (e.g., with email address, telephone number), this may only be done after a more detailed, case-by-case examination of legality. The processing of personal data always requires a legal basis (e.g., contractual obligation).

Regardless of the tool used, it is possible that the tool also saves and processes the data entered - the tool is therefore trained with this data.

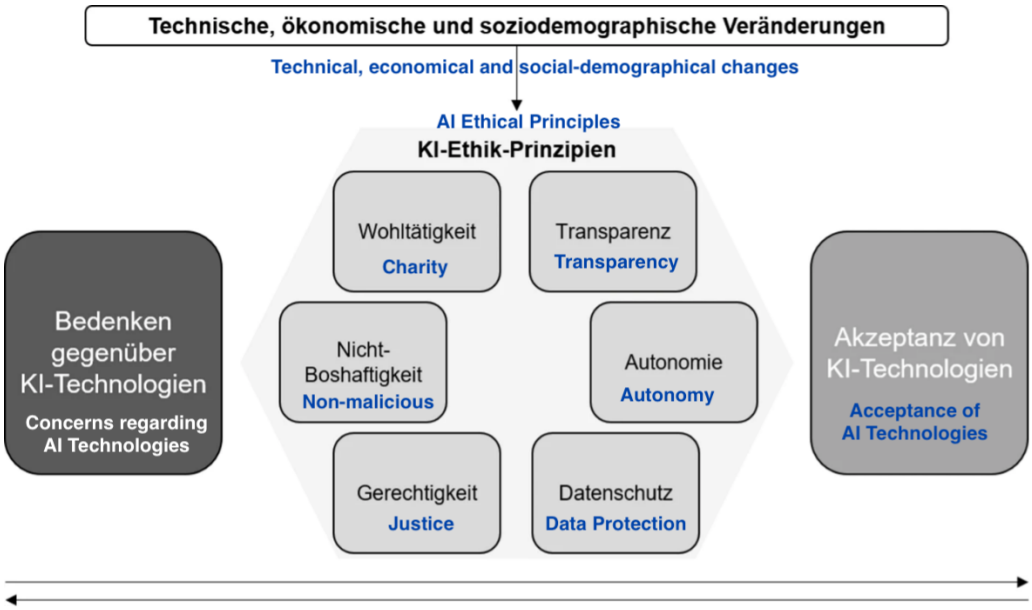
For this reason, it is recommended that **other information and data are entered** into the corresponding tool **with appropriate care.** It should be carefully checked who is behind the AI tool and what happens to the data by the providers (copyright, further processing of data, raw data, etc.)

This also applies regardless of the applicability of data protection law in the event that **confidential data such as business secrets, new research results**, etc. are entered. This should be **avoided at all costs**.

6 Ethical implications

In general, the broad topic of the use of generative AI is ethically controversial. Reasons include the aforementioned concerns about copyright and data protection as well as gender sensitivity, bias (an AI tool is not neutral, but always "biased", e.g., through supposedly racist or political statements), the interference with personal data or even more far-reaching social effects (e.g., the concealment of "hidden human labor", i.e., mostly illegal labor practices, or the enormous consumption of resources behind AI), to name just a few critical points. Since most AI tools are trained by a number of inputs from different users, the results of their own prompts are heavily influenced by data that may be partially correct, incorrect or incorrect in their formulation (e.g., ethically). This is precisely why discussions about generative AI should always include ethical implications. This part of the guideline serves to **raise awareness in order to understand the potential of AI systems themselves and to be able to use AI tools in a positive, yet critical and ethically correct manner**

The categories in the following graphic provide a general overview of valid ethical principles relating to AI:



Graphic: Ethical principles in the age of AI. (Illustration based on Floridi et al. 2018; Jobin et al. 2019; Manzeschke 2021; Mason 1986); from Barton, MC., Pöppelbuß, J. Principles for the ethical use of artificial intelligence. HMD 59, 468-481 (2022).

The ethical (and moreover, the considerate) aspects of the use of generative AI in higher education are in detail:

- **Transparency**: In terms of transparency, it is important that users of AI tools understand how they work to the extent that they can declare their use and, in case of doubt, explain critical

aspects. All university members should be able to question why certain prompts and results of an AI tool are generated and that results may contain falsified information (keyword: "deepfakes") or ethically questionable formulations. Any use of generative AI should be explicitly mentioned as such through citation, linking, etc. (see chapter 5.1.3 Academic integrity - also relevant when using image and video material generated via AI). In this way, responsible use of generative AI systems can be ensured for all users. Teachers could, for example, integrate ethical debates or discussions into their teaching content and draw attention to critical aspects of generative AI through the active use of AI tools in teaching

- **Data protection & responsibility**: The protection of the personal data of students, lecturers and all other members of the university is a top priority. All employees and students of CUAS bear (ethical) responsibility in this sense and must take measures on their own responsibility (e.g., no entry of personal data) to ensure that sensitive data is not stored and further processed when using AI tools. This helps to prevent misuse when using generative AI systems and to promote trust in the technology (far-reaching in the sense of "AI literacy") through careful handling. Here, too, reference should be made to the labeling of the AI content used (see previous point on transparency).
- **Fairness**: The use of AI systems must be designed by all university members in such a way that it explicitly avoids discrimination or prejudice. In this way, AI tools can also be seen as a useful tool for inclusion. It is also important to note that all results from the use of AI tools must not be assumed to be correct without question. Universities and university staff always share responsibility when using and evaluating the results of AI tools and should address more problematic aspects of AI.
- **Sustainability**: Like all other work resources, AI tools should be used by all members of the university in the most environmentally friendly and resource-conserving way possible. This is guaranteed, among other things, by a token limit of the university's internal AI license *Academic AI*

These principles help to raise awareness for the conscious, ethical and responsible use of generative AI in higher education. Interested parties (especially teachers) can find out more about the ethical guidelines for the use of AI and data for teaching and learning purposes via the following link and the following handout.

In summary, this means that ethical aspects as well as inputs and results of generative AI must continue to be considered, critically scrutinized and independently reviewed by real people (and not an AI tool/chatbot) in addition to data protection and copyright concerns. If there are any doubts about a particular AI tool, all employees of CUAS are advised to contact the AI working group or to refrain from using the AI tool and instead use the university's internal AI license *Academic AI*, which can be used in a secure environment and without passing on data for training

purposes. Of course, this still includes the sensitive and ethically correct handling of all AI tools! Taking these ethical aspects into account, the general digital competence of all members of CUAS can be specifically promoted and generative AI can be understood as a helpful tool for teaching and learning and as an aid to increasing the efficiency of existing work steps. However, everyone should continue to question the meaning and purpose of artificial intelligence, as it does not replace higher education, but at best represents an extension of one's own acquired knowledge.

Further information on the ethical implications of using generative AI can be found in the sources used for Chapter 6:

- Barton, MC., Pöppelbuß, J. Principles for the ethical use of artificial intelligence. HMD 59, 468-481 (2022).
- University of Vienna. Guidelines "Umgang mit KI in der Lehre" - Handbuch für Lehrende der Unviersität Wien . v.a. p. 17f (2023).
- European Commission, Directorate-General for Education, Youth, Sport and Culture, Ethical guidelines for teachers on the use of AI and data for teaching and learning purposes, Publications Office of the European Union (2022)
- https://www.unesco.org/en/artificial-intelligence/recommendation-ethics/cases