



Guidelines for students in Mathematics and Physics Courses at Faculty 8 regarding the use of IT/AI-based writing and programming tools in student work

Basis: Handreichung für Prüfende zu KI-Werkzeugen und Prüfungen, insbesondere unbeaufsichtigte, schriftliche Prüfungen wie Bachelor- und Masterarbeiten der Universität Stuttgart, Lisa Schöllhammer, Stand Juli 2023, Version 1.0 (German)

The increasing emergence of IT/AI-based writing and programming tools necessitates binding regulations for their use in unsupervised written examinations and other student work¹. The following regulations are intended to provide students with certainty in dealing with IT/AI-based writing tools. In this context, we understand IT/AI-based writing tools to be software programs that use machine learning algorithms to assist with various writing tasks. This ranges from grammar aids to programs that paraphrase existing texts or text passages, generate texts from keywords, and create summaries of longer texts and text passages. Programming tools offer automated code generation from a textual description of a task. In the following, the term "writing tools" also includes such programming tools.

In general, the use of IT/AI-based writing tools is permitted as an aid in the aforementioned unsupervised, written student work. However, we expressly point out several aspects regarding the use of IT/AI-based writing tools:

- The use of IT/AI-based writing tools is voluntary and is explicitly not recommended. At the time of writing these guidelines, there are data protection concerns regarding the creation of accounts and the use of AI tools for almost all relevant products.
- For all IT/AI-based writing tools, there is currently a lack of information about the data sources used, information about the algorithms behind the automated data processing, and information about whether data is passed on to third parties. Personal data and NDI-protected research data could thus for example be passed on to other persons for training the AI tool. This could constitute a violation of the data protection rights of third parties, which could have criminal consequences under the European General Data Protection Regulation (GDPR, 2018).
- Regardless of the use of IT/AI-based writing tools, the student as the author is fully responsible for the content of the work. This also applies to the accuracy of content

¹ The term 'student work' encompasses unsupervised written assignments such as student research projects, seminar papers, laboratory reports, homework assignments, and final theses (Bachelor's thesis, Master's thesis).



adopted from IT/AI-based writing tools and, in particular, to the possible verbatim adoption of content from other published texts (plagiarism).

- In general, the use of IT/AI-based writing tools is subject to a disclosure requirement. This follows from the principles of good scientific practice, which require the disclosure of external contributions. The verbatim adoption of text modules is explicitly not recommended. We strongly recommend a content review and revision of the texts or text modules and codes/implementations generated with the help of IT/AI-based writing tools regarding linguistic aspects and their content. Furthermore, the IT/AI-based writing tools used must be clearly identified as aids (product name and version, source, scope of functions used). In the case of final theses, the use of IT/AI-based writing tools must also be declared in the extended declaration of academic integrity.

This handout is intended as a guide to the use of IT/AI-based writing tools until further notice. The rapid development of such tools will likely necessitate regular adjustments to the regulations. Deviating from these general guidelines, those responsible for a course may establish stricter guidelines.



Example of Listing AI-Based Tools:

For the summary and Chapter 2 [section-specific listing], text modules were used that were generated with the help of the software ChatGPT 3 (openai.org). The structure and expressiveness of some more complex sentences in the abstract and summary were improved with the help of Grammarly (grammarly.com). The runtime optimization of the implemented simulation program was significantly supported by GitHub Copilot (github.com).

Proposal for an Extended Declaration of Academic Integrity:

Declaration

I, *First Name Last Name*, hereby affirm that I have written my work independently, that I have used no sources other than those indicated and have marked all statements taken verbatim or paraphrased from other works as such, that the submitted work has not been the subject of another examination procedure either in whole or in substantial parts, that I have not yet published the work either in whole or in part, unless the examiner has previously approved the publication, and that the electronic copy is identical to the other copies.

Furthermore, I hereby declare that when using IT/AI-based writing tools, I have fully listed these tools as aids used with their product name, my source, and an overview of the scope of functions used in the context of this work. In the creation of this work, I have worked independently throughout and in a controlling manner when using IT/AI-based writing tools.