

Guidance on the use of AI in teaching in the BSc, MSc and PhD in Computer Science at the University of Basel, approved by the curriculum committee Computer Science in May 2024

Background: The working group AI in Teaching at the University of Basel (<https://www.unibas.ch/en/Studies/My-Studies/AI-in-learning-and-teaching.html>) has compiled [guidelines](#) on how to use AI-based tools in scholarly writing. According to these guidelines, AI-based tools may be used for student work under the following conditions (a brief summary of the guidelines is provided below; the guidelines should be consulted for the detailed requirements):

1. The use of AI tools must always be declared completely and transparently. Without this information, work can be considered as attempted plagiarism or cheating.
2. The author is responsible for the correctness of the AI-generated content.
3. Each student thesis must represent an independent contribution by the author, even when using AI tools.

The type of declaration is left to the respective disciplines and discipline-specific traditions. This information sheet regulates the declaration of the use of AI tools in the Computer Science degree programs. This declaration is independent of the use of the form on scientific integrity, which is available on the website of the Dean's Office of the Faculty of Science and which is mandatory for student theses.

AI-supported tools are powerful aids that should be used responsibly for all student work (exercises, seminar papers, projects, presentations, theses). To ensure this, the following three cases are distinguished for their use in the BSc, MSc and PhD Computer Science at the University of Basel:

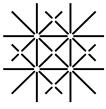
A. Editing of texts

AI-based tools for the **improvement of self-authored texts or self-programmed source code** (such as deepL or ChatGPT) can be **declared at a prominent place in the work** – for example in an introductory section to the work (after the preface) “Use of generative digital tools”. The individual tools used must be listed and, if applicable, further details on how they were used.

Example A.1: “For the report on my bachelor’s thesis, I used deepL translate to translate texts that I wrote myself in German into English. No new content was created by an AI tool. I have checked all translations and take full responsibility for the result.”

Example A.2: “For the report on my master’s thesis, I used deepL write to improve the language of texts that I had written myself. No new content was created by an AI tool. I have checked all texts and take full responsibility for the result.”

Example A.3: “For my PhD dissertation, I used ChatGPT to improve texts that I had written myself. All prompts used were of the type “Improve [...]”, “Shorten [...]”, “Revise [...]”, or “Write [...] more



comprehensibly". No new content was created by an AI tool. I have checked all texts and take full responsibility for the result."

The use of AI-based tools to improve self-written texts or self-written source code generally has no effect on the grading of the thesis. Details must be discussed with the thesis supervisor.

B. Summary of scholarly sources

If AI-based tools are used to summarize existing sources (for example, for a description of related work), then **each of these text passages must be explicitly marked** in a student paper. For this purpose, the beginning and end of the generated text must be marked and all prompts must be listed in detail. At the same time, care must be taken to ensure that all information in the generated text is scientifically correct and that the referenced sources actually exist. In general, the responsibility for the correctness of the generated text lies with the author and, in particular, that the referenced sources are authentic.

Since student reports have the character of independent scientific work, it is possible that the use of AI-based tools for summarizing sources may have an impact on the grading of the work. Details on this must be discussed with the thesis supervisor.

C. Content generation

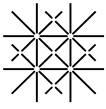
If AI-based tools are used to create new content, the type and use of the generated content must be differentiated in the declaration:

i.) Illustration / description of self-generated concepts and content:

When generative AI is used to create **content to describe, illustrate or document own contributions** (e.g. the creation of images or diagrams using Dall-E, Midjourney, Stable Diffusion, Adobe Firefly or other image-generating AIs for a written report or presentation, or if source code is documented using tools such as ChatGPT or an AI assistant in an Integrated Development Environment (IDE)), then this must be documented in detail in accordance with the guidelines of the University of Basel (specification of "prompt", tool with version, date of generation, etc.). In the case of explanatory texts, images or videos, each object must be specifically declared, stating the tool used in each case. When using AI-based tools for the documentation of source code, this can be done using a general statement.

Example C.i.1: "The image was created with the help of Stable Diffusion, version xyz, using prompt '...' on dd.mm.yyyy." in the caption.

Example C.i.2: "I documented the source code I created using the AI Assistant in IntelliJ" must be mentioned both in the header of the respective software packages and in a central location on the associated report.



In all cases, the author must check that the generated objects comply with legal and ethical guidelines or ensure that the generated documentation is correct and assumes full responsibility for the AI-generated objects/documentation.

The use of AI-based tools to illustrate / describe self-generated concepts and content generally has no effect on the grading of the thesis. Details must be discussed with the thesis supervisor.

ii.) Creation of source code:

If generative AI is used to **generate source code** (and not just to complete it via autocomplete – e.g., in AI assistants that are integrated into an IDE), then all generated program parts must be marked accordingly (in the source code). At the same time, the use of the AI tools must be declared quantitatively at a prominent place in the work in the associated written report. The same applies if a generative AI is used to define a program structure (which is then programmed independently).

Example C.ii.1: “Approximately 40% of the source code created in this thesis was generated with the help of GPT Code CoPilot. The details of use and the AI-generated program parts are marked accordingly in the source code.”

The author is responsible for the correctness of the AI-generated source code. The supervisor of the thesis decides on any effects of the use of AI tools for the creation of source code on the assessment of the student's thesis.

iii.) Creation of conceptual contributions:

If AI tools are used to **generate research questions or conceptual contributions**, then this must be documented in detail with all original prompts – either in a prominent place in the document or at each occurrence of the generated content.

The author is responsible for the correctness of the AI-generated content. In general, the use of AI-based tools for the creation of conceptual contributions has an impact on the assessment of the work – and in individual cases can also lead to an insufficient assessment if the independence of the work is no longer guaranteed. The supervisor decides on the assessment. In the event of an insufficient assessment due to the use of AI tools, the Computer Science Teaching Committee (UK Computer Science) must also be informed.

Concluding remarks: Questions about this information sheet should be addressed to the Teaching Committee Computer Science at informatik@unibas.ch.