

**Guidelines for the Use of Artificial Intelligence in Learning Activities and Theses
Metropolia University of Applied Sciences**

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Scope of the Guidelines

These guidelines apply to all members of the Metropolia staff involved in teaching and learning activities, as well as to students. These guidelines complement and specify the previously issued AI guidelines at Metropolia. The guidelines are continuously updated and maintained by the Learning Development Team (Uudistuva oppiminen). Significant content changes and updates will come into effect based on the decision of the Director of Lifelong Learning. The preparation of these guidelines utilized ChatGPT version 3.5 (OpenAI, 2024).

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1. Instructions for Teachers

1.1 Planning Teaching

Artificial intelligence can be used to support the planning and implementation of teaching in various ways. AI does not replace the teacher but can act as a support and expand the possibilities of teaching. AI programs can, for example, support phenomenon-based and challenge-based learning by quickly providing information and helping the formulation of learning objectives. AI programs can support teachers in developing learner-centered learning by offering, for example, coaching, ideation, and language assistance. However, the teacher is always responsible for the content and pedagogical quality of the course. It is essential to guide students to use AI responsibly. Below are some examples of how to utilize AI.

In teaching planning, AI can be used to assist in:

- Planning the learning process:
 - AI can be asked for ideas to create learning objectives and assessment criteria, schedule the course, and formulate learning tasks and student activities.
- Supporting individual learning processes:
 - AI can help to ideate individual performance methods and different forms of learning tasks.
- Planning phenomenon-based teaching:
 - For example, the Moodle plugin developed at Metropolia can generate tasks and help to integrate sustainable development perspectives into teaching.
- Producing teaching materials and learning tasks:
 - AI can provide tips to clarify teaching materials and improve accessibility. Modeling and simulation tools can help visualize complex concepts.
 - AI can create model answers to illustrate the types of responses that are desirable and/or undesirable.
 - Students can be guided to use AI as an immediate support for their learning, similar to a personal tutor.

1.2 Instructing the Use of AI in Teaching

- Each course must include information on how AI can or should be used. Teachers must guide students on the use of AI and ensure that its use is ethically and pedagogically justified.
 - Students should be informed about which tools they can use and how.
 - If there are restrictions or prohibitions on the use of AI, these must be clearly communicated to students. Restrictions can be described in course instructions or alongside learning tasks.
 - Restrictions should be based on the learning objectives of the course and ethical considerations.
 - Equality must be considered when selecting AI applications. Students cannot be required to use paid programs.
- The use of AI in needs to be referenced according to the instructions given by the teachers.
- More detailed instructions on the use of AI in theses can be found in section 3. AI use and reporting in theses.

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1.3 Assessment

The use of AI in assessment requires careful consideration and familiarity with the terms of use to ensure that students' work is not submitted to AI programs that store data without the students' consent. Parts of course assessments can be done using different programs, but students cannot be required to use paid programs. It is also important to note that students' access to various programs may create inequality regarding the use of AI.

Responsible use of AI requires transparency in the use and reporting of programs. Using AI in tasks where it is explicitly prohibited is academic misconduct. Similarly, inadequate citation of AI use is misconduct.

2. Tips for Students

2.1 Use AI as Support

AI can be used in learning in many ways. It is essential to follow good study practices and report the use according to the guidelines. Below are some example situations where AI can act as support:

- You can have discussions with AI on various topics and ask for additional information. However, it is crucial to approach the content produced by AI with source criticism.
- AI can be used as a tutor and sparring partner:
 - You can practice different situations and content by asking AI to present questions related to the topics.
 - AI can act as an assistant in group tasks by providing ideas to support teamwork.
 - You can ask AI for feedback on your ideas and develop them further.
- AI can be used to correct, summarize, and translate the language of the text you have produced, unless prohibited by other guidelines. Note: AI-generated text or translation is not necessarily correct or without errors.
- Students should familiarize themselves with different ways AI is utilized in their field.
- Remember to familiarise yourself with the terms of use of AI programs!

2.2 Check AI Outputs and Terms of Use

- AI can be used to generate ideas and drafts, but it should not replace your own thinking and writing work.
- Correcting the language of the text you have produced is allowed, but generating entire texts with AI is generally not permitted.
- Sensitive information, such as personal data, should generally not be entered into AI programs that operate online and store data. By providing sensitive information to an online AI program, a student may accidentally violate ethical and legal rules, such as those related to data protection or copyright.

3. Responsible Use and Reporting of AI in Theses

These guidelines include Metropolia's general principles for the use and reporting of AI in theses. The instructions complement the AI guidelines for learning activities and are subject to updates.

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Degree programs can provide more specific instructions, for example, regarding field-specific referencing practices. However, general principles must be consistently followed to ensure student equality.

3.1 Use of AI in Theses

AI can be utilized at various stages of the thesis but it cannot act as the author of the thesis. The purpose of the thesis is to develop the student's thinking, high-level expertise, and academic expression. AI programs can help plan and refine the work, but the student is always responsible for their learning, the content of their thesis, and ensuring that the work adheres to good scientific practice. If the thesis is part of a project, the thesis is also guided by Metropolia's AI use guidelines in RDI activities.

3.2 Tips for Using AI

AI can be beneficial at various stages of the thesis, for example:

- Ideation and development of thoughts: You can discuss the thesis idea, formulate research questions, or structure the work with AI.
 - Example: Discussion different approaches and research designs with ChatGPT.
- As tools for information retrieval:
 - Example: Discuss about the searching of information with ChatGPT and ask about different keywords that can be used. The response from the AI program cannot be used as scientific source of information for the thesis, but discussions can provide ideas for narrowing one's topic and starting information retrieval. Peer-reviewed scientific articles and other information sources needed for the thesis should be sought from library databases and Google Scholar.
- Creating diagrams and figures.
- Modifying and correcting the language of the text produced. Note: Writing is part of the thesis process and tools can be used for assistance but not for replacing the work that students are expected to do themselves.
- Assisting in translating the abstract of a Finnish-language thesis into English.
- In some cases, AI-generated content can be used as data in the thesis, requiring a direct reference.

3.3 Use of AI is Not Allowed in Maturity Tests

- In bachelor's degrees, the maturity test demonstrates both content expertise and language proficiency.
- In master's degrees, the maturity test demonstrates content expertise.

3.4 Checklist for Good Scientific Practice

The use of AI must adhere to the principles of good scientific practice:

- The student is the author of the thesis and thus responsible for the content and writing of the thesis.
- AI-generated content must not be credited as the student's own; its use must be reported openly and transparently. Inadequate citation of AI use is viewed as academic misconduct.
- AI's outputs are not necessarily accurate, so it is crucial to verify information from other sources and cite original sources.
- Without fact-checking, one risks engaging in fraudulent activities, such as fabrication or falsification. To avoid plagiarism, it is essential to cite original sources.

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- Particular attention must be paid to data protection, confidentiality, and copyright when using AI. Familiarize yourself with the terms of use of AI programs.

3.5 Familiarize Yourself with Programs' Terms of Use

- In general, avoid sharing following data with programs that operate online and store data:
 - Personal data:
 - Note: Personal data includes any information that can identify a person directly or indirectly. Examples include names, email addresses, car registration numbers, but also voice recordings, location data, health information, and many other details. More information on personal data is available from the Data Protection Ombudsman.
 - Confidential, personal, or other material with restricted usage rights, such as those governed by licenses or other agreements.
 - Unpublished texts or other productions created by others without their consent. This protects individuals' rights to their works.

3.6 Describing and Referencing the Use of AI in Thesis

Describing the use of AI in theses is new, and practices are still evolving. Since AI can be used both as a tool for creating content and producing content, the citation methods vary according to the usage. This guideline will be updated as needed, and additional instructions can be specified by degree programs.

All theses must describe the use of AI openly and clearly.

- The description is written after the abstract or added as a separate appendix at the end of the work. After the description, the student adds a statement of their responsibility. For example: "As the author of this thesis, I am responsible for all the content."
- If the use of programs is limited to organizing and refining the work process, the use of these tools is comparable to other tools (e.g., Microsoft Word, Grammarly, Google Scholar) and does not need to be cited separately in the reference list.
 - Example 1: "I used OpenAI's ChatGPT version X.X to brainstorm research design and structure and to finalize the language and format of citations. As the author of this thesis, I am responsible for all the content."

3.7 Referencing AI in Text and Reference List

- The AI program itself cannot be used as a source of information for the thesis, but in some cases, AI outputs function as data, requiring a direct citation.
 - For example, when AI-generated content is used as such (e.g., direct quotes, images) or only slightly modified (the student has edited the text generated by AI but not the content), a direct citation (program, year, exact prompt) must be given in the text and listed at the end of the reference list under the heading "AI Used."
 - If the prompt is multi-stage or uses other materials, its use can be described in the text or as a separate appendix.
- Follow degree-specific instructions for citation formatting. The most important thing is that details of direct quotes are available both in the text and at the end of the work when needed.

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- Example: The author refers to AI-generated content. This guideline applies only to situations where the AI-generated content is itself of interest to the thesis. All factual content must be verified from other sources.
- The exact details of how the text was produced are provided either in the text or as an appendix.
 - Citation method A) Describe the tool and prompt used in the text and add a reference to the tool at the end.
 - E.g., When asked with the prompt "What will the interaction between humans and technology look like in the near future, in the 2030s?" ChatGPT-3.5 provides five main points. (OpenAI, 2024)
 - Citation method B) Provide an internal citation after the content, showing the program, year, given prompt, program, year, and date.
 - E.g., According to the AI-generated response, several development trajectories can be seen in the interaction between technology and humans (ChatGPT-3.5, 5/2024 version: "What will the interaction between humans and technology look like in the near future, in the 2030s?" chat.openai.com/chat).

3.8 Referencing AI in Reference List

- If AI has been used in any form to produce the content of the work, the AI tools are listed at the end of the reference list under a separate heading, e.g., "AI Programmes."
- Provide details of the tools used, including the producer, name, year, version, and link:
 - OpenAI. (2023). ChatGPT (Version date/number) [Large language model]. <https://chat.openai.com/chat>
 - Microsoft Corporation. (2024) Microsoft Copilot [Computer program] Copilot (microsoft.com)

3.9 Ensuring Authorship: Notes for Teachers

- If the teacher suspects the student is misrepresenting their role in producing the work, they can request a more detailed description of the tools used or ask the student to rewrite some sections.
- Points to note regarding authorship and text quality include:
 - The student's description of AI use is very brief or vague.
 - The style of the text varies between sections.
 - The text contains repetitive structures or phrases.
 - The text structure is not coherent.
 - The work contains outdated or incorrect information.
- If there is suspicion during the assessment that the student has used AI contrary to the guidelines and good scientific practice, the situation will be handled according to the disciplinary procedures for academic misconduct.
- AI detection tools can be used cautiously as one tool among others when reviewing English-language works. However, it should be noted that AI detection tools can give false results and can be deceived. Therefore, percentage scores from detection tools should not be given threshold values, and their results should always be interpreted as part of the overall assessment.

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