Institut national de la recherche scientifique

GUIDELINES FOR THE RESPONSIBLE USE OF ARTIFICIAL INTELLIGENCE IN GRADUATE STUDIES

A GUIDE FOR THE STUDENT COMMUNITY

GRADUATE AND STUDENT SUCCESS SERVICE

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INRS

As artificial intelligence (AI) tools—particularly generative AI (e.g., OpenAI's ChatGPT, Microsoft Copilot, etc.)—become increasingly integrated into academic and scientific practices, INRS is establishing guidelines for the use of AI in coursework, master's and doctoral theses, and scientific publications. These guidelines are intended for the student community and aim to uphold **academic integrity**.

This document first presents the main guidelines, followed by a practical "Responsible AI Use" checklist on page 6.

Given the rapid evolution of AI technologies, these guidelines may change over time. It is essential for students to stay informed of updates.

TRANSPARENCY IN AI USE

AI can enrich academic work and support high-quality research when used thoughtfully and creatively. However, its use must align with the highest standards of academic and research integrity. *"The use of generative AI tools in preparing and writing assignments, master's theses, doctoral essays, and doctoral dissertations must always be fully transparent."*[1]

Transparency in AI use is based on the following principles:

- **Prior agreement with the research supervisor**: Graduate students must discuss and define, in advance, the acceptable ways to use AI tools with their supervisors.
- **Identification and citation of AI contributions**: Any content generated using AI must be:
    - Clearly identified in academic work, dissertations, and theses.
    - Described precisely, specifying the tool's role.
    - Explicitly cited. For guidance on proper citation, please contact the SDIS team.
- **Distinction of personal contributions**: Students must clearly distinguish their own intellectual contributions from those generated by AI and make these distinctions explicit in their writing.

PRIOR AUTHORIZATION

Using AI tools without explicit authorization may constitute a breach of academic integrity and responsible conduct in research, and may result in serious disciplinary consequences.

Students must therefore ensure they are permitted to use AI tools in their coursework and research:

- **Mandatory authorization:** Students must obtain explicit approval from their research supervisor, professors, or program administrators before using AI tools, regardless of the context.
- **Broad application:** This requirement applies both to the process of generating content and to the outputs generated, including:
    - Text (writing, summaries, etc.)
    - Images (illustrations, etc.)
    - Graphs, visuals, and analytical data
- **Specific provisions:** INRS research centres may have stricter rules or additional requirements regarding AI use. Students must be aware of and comply with the guidelines specific to their discipline—see also: **Specific disciplinary provisions**.

RESPONSIBLE USE OF AI

Responsible use of AI is based on the following principles:

- **Preserving academic skill development:** AI should supplement—not replace—students' intellectual work. It must not undermine the acquisition of essential academic skills such as critical analysis, writing, research, and problem-solving.
- **Individual responsibility:** Students remain fully responsible for any content they submit, whether generated by AI or created independently. This includes verifying the accuracy, ethics, and originality of all information used.
- **Awareness of limitations and risks:** It is important to understand that AI tools have limitations related to reliability, relevance, and objectivity. Students must also be aware of potential cybersecurity risks, algorithmic bias, and inappropriate uses of these technologies.
- **Environmental cost:** Students should consider the significant energy cost associated with AI technologies and aim to use these tools in an environmentally responsible manner.

DATA PROTECTION AND VALIDATION

The use of AI raises important considerations regarding data protection and information reliability.

- **Protection of sensitive data:** Personal, confidential, or unpublished information—such as research results—must never be shared with AI tools without explicit authorization. AI platforms may store or process data unpredictably, posing serious risks to privacy and cybersecurity. Any use involving sensitive data must comply with the INRS Policy on Personal Information Governance, which provides clear guidelines for responsibly and securely managing personal data in accordance with legal and ethical requirements.
- **Cybersecurity risks:** Uploading data to online AI platforms can expose users to cyberattacks or data breaches. Students should prioritize secure solutions that comply with data protection laws.
- **Validation of information:** AI tools do not guarantee accuracy or objectivity. Algorithmic bias may lead to incomplete or incorrect information influenced by data used to train these systems. All AI-generated information must be systematically verified using reliable sources before being incorporated into academic work.
- **Awareness of algorithmic bias:** AI outputs may reflect biases present in training databases, which can affect the diversity and inclusivity of responses. Students must remain critical and cross-check information with multiple perspectives.

INTELLECTUAL PROPERTY

Using AI in academic or scientific work raises important issues related to intellectual property and plagiarism.

- **Risks of rights violations:** Integrating AI-generated content can lead to potential copyright or intellectual property violations. AI tools may rely on protected data or works without ensuring lawful use, which can expose users to legal disputes.
- **Institutional and legal compliance:** Students are responsible for ensuring that their use of AI tools complies with institutional policies and intellectual property laws.

- **Plagiarism:** AI must be used in accordance with citation, referencing, and source attribution standards.
- **Responsible practices:** Students must verify that AI-generated content is original or properly attributed and should prioritize tools that comply with data protection and copyright regulations.

SPECIFIC DISCIPLINARY PROVISIONS

AI usage modalities and opportunities may vary widely across scientific disciplines, and some situations may not be fully covered by these guidelines. Students are expected to be responsible and transparent in applying the guidelines within their own academic activities and disciplinary contexts.

Responsible AI use in this context includes:

- Becoming familiar with AI tools to assess the ethical and practical implications of using them
- Ensuring compliance with disciplinary standards and expectations
- Evaluating AI tools to confirm they meet the quality and ethical requirements of the field

CHECKLIST FOR RESPONSIBLE USE OF ARTIFICIAL INTELLIGENCE (AI)

1. **Prioritize your academic learning**
   Use AI as a supportive tool—it should not replace the development of essential academic skills such as critical thinking, independent research, and writing.
2. **Obtain prior authorization**
   Always check whether AI tools are allowed in a given context. Follow institutional policies and specific guidelines to avoid inappropriate use.
3. **Take responsibility for AI-generated content**
   You are fully responsible for any content produced with AI. Always verify the accuracy, relevance, and originality of the information before including it in your work.
4. **Understand associated risks**
   Be aware of potential risks, including:
   a. Privacy: Sensitive or personal data may be exposed.
   b. Plagiarism: AI-generated content may include unoriginal material without clear attribution.
   c. Cybersecurity: Some AI tools may put your information at risk of cyberattacks.
   d. Algorithmic bias: AI outputs may reflect biases present in the training data.
   e. Environmental impact: Consider the energy footprint of AI tools and use them responsibly.

Maintain a critical mindset and practice transparency when using AI tools

REFERENCES AND OTHER GUIDES

This guide is inspired by the following sources:

[1] Université de Montréal, *Lignes directrices pour une utilisation appropriée de l'intelligence artificielle (IA) générative aux études supérieures à l'Université de Montréal*, Graduate and Postdoctoral Studies, Editor. 2024, Université de Montréal.

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University of Geneva, Introduction à l'IA générative de l'Université de Genève – https://www.unige.ch/numerique/fr/plan-daction/ia1/accueil/guide-pratique-ia/introduction-lia-generative/ – Accessed on March 3, 2025.

Université du Québec. (2025). *Énoncé de principes sur l'utilisation responsable de l'intelligence artificielle générative dans les activités de formation et de recherche*. Academic Affairs and Research.