

*Feel Free to adapt this guide
for your students*

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D STUDENT GUIDE

Generative AI refers to a kind of artificial intelligence software that is capable of generating information in response to prompts. The software is trained on source data, and uses that training data as input to a sophisticated model that predicts the appropriate response to the prompt. It does not understand the prompts, but it produces a convincing simulation of understanding. Examples of generative AI systems that use text include ChatGPT and Bard, and generative AI models capable of generating images include Midjourney and DALL-E.

Generative AI tools can be used in ways that increase productivity and help you to learn. However, they may also be used in unproductive ways that provide answers without helping you to learn.

Policy on generative AI:

- You may use AI tools to help you learn during lab exercises and assignments.
- You will NOT be permitted to use AI tools in secure assessments (i.e., the Test and Exam).

Examples of productive use

Generative AI tools are used in industry so you will be likely to use them regularly in your future work after graduation. Therefore, you should learn to use them appropriately to receive the most long-term benefit. As a student, effective uses of generative AI tools are centered on helping you understand course material, and may include asking generative AI to:

- Explain a given topic, or to provide an example of how programming constructs are used.
- Explain your program one line at a time.
- Produce an example that is similar to assignment questions.
- Explain the meaning of error messages.
- Generate code to complete tasks that you have already mastered from previous coursework.

Examples of inappropriate use

Some uses of generative AI do not typically help you learn, and such uses are likely to result in worse long-term outcomes (e.g., you will not be able to complete Test and Exam questions, or to continue following courses that expect a mastery of early programming content). Examples of these uses are:

- Using AI tools on official assessments where it has been forbidden.
- Asking generative AI to complete laboratory questions or assignments for you.
- Asking generative AI to debug code that has errors.
- Writing a code solution in a language you know and then asking an AI tool to translate that code into the language required for the assignment.

Risks of generative AI

There are many risks associated with the use of generative AI.

Accuracy If you are using generative AI tools for learning then you should always double-check the content. For example, if you are assigned to write a program that uses a specific algorithm, AI tools may generate a solution that arrives at the correct answer but does not use the required algorithm. If you use generative AI to assist in the creation of assessed content then you are responsible for the accuracy and correctness of the work that you submit.

Quality Content generated may be of poor quality, and generic in nature. Code may have security flaws and may contain bugs. It is important that you understand how any generated code works and you evaluate the quality of the content.

Learning Generative AI can be a powerful productivity tool for users who are already familiar with the topic of the generated content because they can evaluate and revise the content as appropriate. Tasks assigned by your teachers are designed to help you learn, and relying on AI tools to complete tasks denies you the opportunity to learn, and to receive accurate feedback on your learning.

Over-reliance Using AI tools to do your work for you may achieve the short-term goal of assignment completion, but consistent over-reliance on AI tools may prevent you from being prepared for later examinations, subsequent coursework, or future job opportunities.

Motivation You may experience lack of motivation for tasks that generative AI can complete. It is important to understand that you need to master simple tasks (which generative AI can complete) before you can solve more complex problems (which generative AI cannot complete). Stay motivated!

Impact on others

There are many consequences to inappropriate usage of AI tools. Some of these consequences may be unintended, and could potentially harm others. For example:

Other students You could expose other students to harm by preventing their learning or including content in a group assignment that violates academic integrity.

Faculty Violating academic integrity standards through the use of AI tools requires time and energy, and is emotionally draining to teachers and administrators, to enforce these standards.

Institutional Including code from AI tools that you do not understand could expose the university to loss of reputation or even financial harm through lawsuits.

Academic misconduct

Using generative AI in ways that are not permitted will be treated as academic misconduct. This will have serious consequences.