



GENERATIVE AI

PDF resources included in this booklet

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Generative AI

When should or shouldn't you use Generative AI as a student at Western?

Generative Al

It is important that if you use generative artificial intelligence (AI) tools, such as ChatGPT in your university studies, you use them honestly and responsibly. Inappropriate uses of generative AI can have serious consequences for your studies and future career. This PDF, with practical scenarios, will make clear these appropriate versus inappropriate uses of generative AI.

Artificial intelligence has advanced significantly in recent years and is continuing to progress at a rapid rate. Understanding how to use artificial intelligence tools ethically and confidently is an important skill for your studies and future career. We'll give you tips on how to navigate this everevolving landscape and leverage it for future career success.

STUDY SMART WEBSITE

Find this section on the Study Smart website here:

http://westernsydney.ed u.au/studysmart/home/ generative_AI



What is Generative AI?

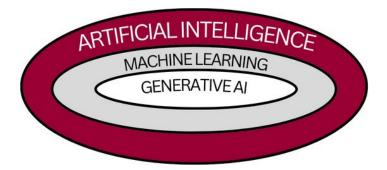
Generative AI is an important concept to understand because you will encounter it in your studies and professional life. But what does 'generative AI' actually mean?

Here's some quick terms to remember:

Artificial Intelligence: An overarching term referring to the creation of intelligent machines capable of performing tasks that require human intelligence.

Machine Learning: When a machine can learn on its own without being explicitly programmed.

Generative AI: Generative artificial intelligence refers to a specific type of machine learning: Developing systems capable of creating new and original content (e.g., images, music or text) that mimic human creativity.



ChatGPT is the most popular generative AI to date. ChatGPT mimics conversational language by statistically predicting the arrangement of words and sentences. Other generative AI tools include:

- Google's Gemini (conversational generative artificial intelligence chatbot)
- Open Al's DALLE (generates images from natural language prompts)
- Midjourney (generates images from natural language prompts)
- Microsoft 365 Co-Pilot (generative AI technology embedded into tools we use every day like Microsoft Word)

Understanding the benefits and limitations of artificial intelligence technologies is integral for academic integrity and something we will now unpack further in this module.



Generative AI and Your Assignments

When it comes to assessments, follow the instructions for using generative AI provided by your Subject Coordinator in your Subject Outline for each subject.

There are different statements on generative AI use that you might encounter in your studies at WSU. Here are some examples to show how different the generative AI stance might be depending on your particular subject:

1. Statement: Staff will co-design an agreement with students on using generative AI that students must then follow for their assessments

What it means: Co-designing an agreement on generative AI means that students and staff work in partnership to shape how they want to use generative AI at uni. For example, at a recent webinar, Western students stated that they want their lecturers to teach them how to use generative AI so they are prepared for the future world of work.

2. **Statement**: Use and critically evaluate the output from generative AI tools in your assessment tasks, making sure to reference the use of generative AI

What it means: In our computer science degree we had an assignment where we had to use the GPT 3.5 algorithm to create a chatbot that refuses to write essays. This tested our programming skills and understanding of ChatGPT prompts. We then had to evaluate our work and acknowledge our use of GPT 3.5 syntax versus our own added syntax.

3. **Statement:** Ethical use of generative AI is permitted but you must reference generative AI. Be aware that the output from generative AI tools may be incorrect, incomplete or biased.

What it means: "For my lab report, I used ChatGPT to help make my ideas more succinct. This was approved by my Subject Coordinator and I acknowledged the use of ChatGPT in my bibliography."

4. **Statement:** Use of generative artificial intelligence (AI) tools to brainstorm ideas, summarise reading material or to edit your submission is permitted. The content of your final submission must be your original work, you cannot use generative AI to generate text for your final submission.

What it means: "I used ChatGPT to brainstorm ideas on possible essay questions relating to a political debate I was interested in. I then refined the possible questions and received final

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approval from my Tutor on the essay question I could use for my assignment. I then wrote my essay without the help of ChatGPT."

5. **Statement:** Use of generative artificial intelligence (AI) is not permitted in this assessment task without appropriate acknowledgement.

What it means: "In my course, we are discouraged from using generative AI. When we submit our essays we need to also attach our essay drafts and screenshots of the editing time on our Microsoft word documents to prove that we have not used generative AI to generate text for our final submission."

6. **Statement:** In this assessment task, you will not be able to meet the learning outcomes related to this subject by using generative artificial intelligence (AI) tools.

What it means: "In my course we are strictly not allowed to use generative AI for our exams. Markers have access to our previous work and will compare our writing style from previous assessments if AI use is suspected."

It is important you **read your subject outlines** for each course closely in order to understand generative AI use in relation to your assessments and exams.

Different subjects will have different approaches to generative AI.

Where the use of generative AI is permitted, like any source, **you are required to acknowledge it**. Follow the <u>Library's guidance</u> for the most up-to-date information on how to **reference content from AI tools**.

The **different ways generative AI** might be used and referenced, include:

- A ChatGPT-generated sentence for an assignment
- Referring to the use of ChatGPT as part of your research methodology
- Using a tool like DALL-E to generate an image in your essay

The WSU Student Misconduct rule defines student misconduct in relation to generative AI as:

copying another person's answers or improperly obtaining answers including from a third party (including any generative AI) to questions in an examination or other form of assessment

Inappropriately using generative AI tools in your assessments is regarded as academic misconduct. It can fall under the following categories:

Plagiarism – submitting work in which the ideas, words or other work are taken from a source and presented as your own work, without acknowledgement.

Contract cheating – outsourcing the whole or part of your assignment to a **third party instead of writing it yourself**.



Artificial Intelligence Literacy

How do you **make sure you're prepared** for your studies and future career? In a world of ongoing technological change, you need to **keep your technological skills updated** as well as your critical thinking skills.

Practicing academic integrity is a way of **applying critical thinking skills** to your use of technology.

Critical thinking is a human skill, a skill that will **ensure you are still relevant** in a world undergoing significant technological change.

Wheatley and Hervieux (2022: 66) have created the useful **ROBOT** test to aid in the memorization of key artificial intelligence literacies, in other words, how we **critically think about the generative Al technologies** we use:

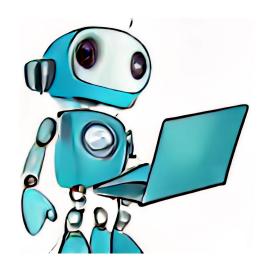
Reliability - how reliable is the information about the AI technology?

Objective - what is the goal or objective of the use of the AI technology?

Bias - what could create bias in the AI technology?

Ownership - who is the owner or developer of the AI technology?

Type – which subtype of AI is it? What kind of technology does it rely on?





Generative AI in Your Working Life

You will likely encounter **Generative AI throughout your working life** and using these AI tools might bring up more ethical decisions you will need to consider.

Benefits to using Generative AI in the workplace:

- Helps you to brainstorm ideas.
- Can summarise complex information to help your understanding of a concept.
- Can increase productivity or efficiency by streamlining automated tasks.

Implications of using Generative AI in the workplace:

- It is an imperfect tool you are at risk of using biased, inaccurate, or even harmful information generated by AI tools.
- Reliance on AI technology may reduce your creativity, critical thinking, and problem-solving abilities.
- Misuse of Generative AI could impact your employment and reputation.





Generative AI: How to Keep Up-To-Date

Generative AI is a rapidly changing space. Here are some tips on how to stay up-to-date and leverage knowledge of generative AI for university and future career success:

1. Learn by doing:

Want to learn about generative AI? The best way to start learning is by playing around with generative AI tools. There is of course the obvious ChatGPT, but there are thousands more tools out there you can also use. Check out a list here.

Going one step further, if you really want to learn about the mechanics of generative AI, try out programming. Don't worry, programming is not as daunting as it might appear at first. There are heaps of programming tutorials online and you can use ChatGPT to check your code and offer advice (keeping in mind ChatGPT can be incorrect and can also provide you with code that has errors, so you'll need to do some problem-solving with your own mind). To get started, try to create your own Chatbot with the ChatGPT algorithm here.

To increase your employability, it's important to find ways to stand out. Think about projects you can work on that demonstrate how you've built new skills, and then you can add these to your CV as a portfolio of work. You can get started today – you don't need to wait for that internship (if anything, these projects will help you secure that internship and future job).

2. Make sure you're on Linkedin:

You've probably heard this advice before, and it is worth repeating. LinkedIn is the current social media platform of the world of work, and future employers will look up your profile to find out more about you. So start creating that profile. Again, don't worry if you don't have much work experience, you can start adding projects to your profile and digital badges (check out step 3). As a Western student, you also have access to a range of free courses on LinkedIn (that you can receive a digital badge for).

3. Complete a self-paced course:

Following on from the previous point, there are lots of self-paced courses out there where you can quickly learn about generative AI and also receive a digital badge to put on your LinkedIn profile. This shows potential employees that you value lifelong learning and are always ready to upskill. For

example, check out these courses:

Google's Introduction to Generative AI Pathway Microsoft's Fundamentals of Generative AI IBM's Generative AI: Prompt Engineering Basics

4. Read and be creative

If you're feeling stuck, the answer is reading. Read about the topics that interest you, or the questions in life that bother you. Reading is never a waste of time, and you never know how it might help you later down the track. Reading makes us more creative – it opens our minds to diverse viewpoints and reframes our understanding of the world.

Don't neglect your critical thinking and creative skills. To succeed in the generative AI era, we'll need people who are interested in both technology and the humanities. So, keep reading and keep up with your creative hobbies. It might spark an idea for a project or start-up that leverages generative AI tools in a way that will help people.



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Images:

Image 1 generated by OpenAI's DALL·E 2 (personal communication, 1st June 2023). Retrieved from https://labs.openai.com/

Image 2 generated by OpenAl's DALL·E 2 (personal communication, 1st June 2023). Retrieved from https://labs.openai.com/

Image 3 generated by OpenAI's DALL·E 2 (personal communication, 1st June 2023). Retrieved from https://labs.openai.com/

Image 4 generated by OpenAI's DALL·E 2 (personal communication, 1st June 2023). Retrieved from https://labs.openai.com/

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