

Student guidance on Artificial Intelligence in Learning and Teaching AY23-24

HW General principles

1. Students should use HW supported technology as this has been reviewed to ensure that it protects their privacy, is cyber secure and is safe to use.
2. Students should think critically about any choice to use technology.
3. Students must be confident that they have made informed decisions about using technology, and that it is in keeping with academic integrity.
4. HW will support students to develop the digital capabilities needed to participate effectively in the university and wider society.

Artificial intelligence

Heriot-Watt University recognises the opportunities and challenges that developments in artificial intelligence (AI), in particular generative AI, offer to learning, teaching and assessment. We will encourage and support students and staff to engage with artificial intelligence in keeping with the HW general principles on use of technology.

How AI may be used at HW

1. Use of generative artificial intelligence (GAI) is permitted provided that such use is clearly identified and referenced. Generative AI spelling and grammar checking (e.g. MS Word, Grammarly) does not need to be referenced unless specifically indicated within the course.
2. The use of generative AI should be referenced using the appropriate referencing format for the piece of work.
3. Any use of artificial intelligence must align with the principles of academic integrity as outlined by the [International Centre for Academic Integrity](#).
4. Courses and programmes within HW may make use of generative AI where it is appropriate to support the learning outcomes, however there is no requirement for a course or programme to utilise generative AI.
5. If generative AI is to be used, course staff will provide clear guidance to students on how and when generative AI may be used within the course. Any use of generative AI within a course will be in keeping with HW general principles on use of technology. HW will keep under review developments on generative AI detection tools.
6. HW will not be utilising any generative AI detection tools for the period of AY23-24. However the existing measures to identify and address academic misconduct are still in use and will apply to any misuse of generative artificial intelligence.
7. HW will also ensure that staff have the appropriate digital capabilities and the appropriate technologies to provide effective teaching, learning and assessment. This will support

students to develop the appropriate digital capabilities to enable them to enter society with the attributes to thrive in this technology-enabled era.

How to choose whether to use generative AI

1. If you are thinking about using generative AI (GAI) to support your learning check whether its use is permitted on your course. Only use GAI if it is permitted on your course and only use it for the purposes it is permitted e.g. you might be permitted to use it to research a topic but not to help you write it up. Remember that whether it is permitted or not may be different on each course and will be different from other institutions in which you have studied.
2. If use of generative AI is permitted on your course, then consider carefully which technology is most appropriate to use. Different technologies have different intended purposes e.g. media generation, text generation, conversational Q&A.
3. If it is a requirement of your course, and you have concerns about using AI, you should raise this with your course leader clearly explaining your concerns. The HW general principles of use of technology may help you with this decision.

How to write a generative AI prompt

The 'prompt' provides the instruction to the generative AI of what you want it to do. It is therefore important that your prompt is as specific and clear as possible. As with any technology, if you provide unclear or poor instructions you will get unclear and poor results.

It is not good practice to use the whole assessment question or brief as a prompt. It is better to break down the question into the key aspects that you need to focus on and tailor your prompts to these.

When writing the prompt be specific about the parameters to be considered and the output you require. Using terms such as 'and', 'or' and 'not' can be useful to ensure information is included or excluded as required.

In the example below you can see how refining the prompt can provide more specific and useful output.

- What is the impact of climate change?
- What is the impact of climate change in my country?
- What is the impact of climate change in my country on farming?
- Write an essay plan for a critical evaluation of the impact of climate change in my country on food production by farmers.

Think carefully about the type of output you require. For example, do you need a research plan, an essay plan, some ideas about the topic, a review or sense check of your current understanding etc.

Caution: Using artificial intelligence to complete a whole assignment for you would not be acting with academic integrity, as you would be presenting work that is not your own. This is plagiarism and would be considered academic misconduct.

Top tips:

1. As you develop your prompts, reflect on what changes you are making to them and how this is helping you to refine your understanding of the topic.
2. Keep copies of your prompts and outputs for future reference. You may need to provide copies of them in your assignments.
3. Use generative AI that identifies where information is sourced from so that you can check that it has used a real source, then make sure that you do check the source and make your own assessment as to whether the source is appropriate and reliable.

How to interpret the output from generative AI

There are key factors to bear in mind when using output from generative AI:

1. Critically evaluate the content and cross-check it with trusted academic sources. (You can get help with critical evaluation from the [Skills Hub](#)).
2. AI generated content may not be accurate (even where it includes references), the outputs are predictions, they are not facts, and the content may be based on biased or stereotypical perspectives.
3. Double check the accuracy of the content and the references using trusted academic sources e.g. via the University Library to access peer-reviewed journals.
4. As you cross-check the content, look for sources that are Accurate, Current, Objective, Relevant and Named. (Find out more about this [ACORN](#) approach from [Cite Them Right Online](#)).
5. The output may draw on copyright information as generative AI operates by scraping information from the internet without checking the owners' permission. Copying this output may be a breach of copyright, so try to identify and use the original source, ensuring you comply with copyright as you do so.

How you use the output from generative AI

How you use the output will depend on what is permitted within your course, check with your course leader to find out what is permitted. Note that what is permitted may be different for different courses.

Key point

You must ensure that you act with academic integrity at all times. Academic integrity is the umbrella term used to describe 6 fundamental values of academia - honesty, fairness, responsibility, trust, respect and courage.

It may be that the output is formative only, helping you to develop and refine your thinking. If this is the case, check your course guidance or speak to your course team on whether you need to reference this use.

Where the output contributes to summative assessment, you must ensure that you reference this following the referencing style and any specific guidance from your course.

Top tip:

If you are using generative AI, take very careful notes of any prompts and outputs so that you can clearly identify what work was generated by AI and you do not unintentionally plagiarise by presenting AI generated work as if it were your own.

Referencing your use of AI

Different referencing styles take different approaches to how generative AI should be referenced. You should ensure that you follow the guidance for the referencing style used on your course.

You can find guidance and examples of how to reference AI in many standard referencing styles via [Cite Them Right Online](#). If you cannot find guidance there you should consult the library and your Course Leader.

You should check whether your course requires you to provide copies of the prompts you used or the output generated by the AI.

Summary

- Use of generative artificial intelligence (GAI) is permitted provided that such use is clearly identified and referenced.
- You should check with your course leader what is permitted on your course and what guidance they have on how it might be used and should be referenced.
- You must act with academic integrity at all times.

Resources

[Student Skills Hub](#)

[HW Academic Integrity website](#) (public-facing)

[HW Academic Integrity hub](#) (students and staff only)

[HW Student Academic Conduct policy](#)

[HW guidance on plagiarism](#)