## Al Frequently asked questions

## What is Generative AI?

Generative AI is a is a field of computer science where information is analysed to create new data based on the data a system has been trained on.

It should not be confused with a search engine.

# What is Al literacy?

Being AI literate means that you understand what Generative AI is and know how to use it effectively, safely and ethically in different contexts. You will also be able to reflect on social, political and legal aspects of the development and use of AI tools.

# What are machine learning algorithms?

Machine learning relies on finding patters in large quantities of data using training data, a model and an algorithm. The algorithm develops a model based on the training data that can be used to generate 'outputs' through recognising patterns. Machine learning algorithms should not be confused with a search engine (although many of the 'top hits' on internet searches are now Al generated)

## How do I know what data or information was used to train AI tools?

Most AI generators do not provide the information their tool has been trained on. It is generally open access information collected from internet sites and social media. Academic research that is behind a paywall will not be accessible and therefore not included. As a result this can lead to both bias and inaccuracies in the outputs produced.

### Can Al read my mind?

No, it can't.

Some AI-based technology is trained to monitor patterns in behaviour and predict likely outcomes which explains why you see targeted adverts based on Google searches or more frequent posting of specific content types on your social media feeds.

## What if I have questions about the ethics of AI?

To use AI appropriately, you would be expected to have questions about the ethics of AI. More information is available on Moodle at <u>ADF\_BP | MyModules</u>.

What are the limitations and biases of Al?

Generative AI tools are limited by the information/data sets that are used for training. It is generally open access information collected from internet sites and social media that is used, because a lot of academic research is behind a paywall will not be accessible. This means that the outputs produced contain inaccuracies and biases. For example, as some Generative AI tools have a reliance on western datasets, diverse views and opinions may not always be acknowledged and stereotypes/outdated views may be perpetuated.

# What is bias and why is it important?

A bias is a leaning towards a particular viewpoint. Most people have biases developed over time that they are unaware of (unconscious bias). Data, statistics and people can be biased, and information can be presented to favour a particular bias. These biases will then be reproduced by Generative AI that has been trained on that data.

To avoid further reproduction of any biases, you need to fact check your work.

## Can large language models generate fake news?

Research from Cornell University shows that some models can easily produce fake news (Sallami et al 2024). It's therefore important to check with a reliable source if you have any doubts about the authenticity of a news article.

# Are there issues around privacy and security?

Can I use AI tools to help me with my coursework?

The University Guidance permits the use of AI in coursework but, unless indicated otherwise in an assessment brief, its use is limited to

- assisting in the structuring of existing work.
- o getting inspiration / overcoming 'writer's block'.
- spelling and grammar checks.
- producing quick summaries / synopses to aid with understanding of a specific topic.
- o editing of existing work

You must cite the use of any Generative AI tool you have used, and your own voice needs to come through in any work submitted i.e. it needs to be in your own style.

Can I use an AI tool to write or otherwise create my coursework for me?

No, unless it is clearly specified in the assessment brief that you are permitted/required to do so. You should never submit work that has not been created by you.

Submitting work that has been wholly generated by AI is considered cheating and will be treated the same way by the university as if you have asked someone else to do your work for you.

Can I use an AI tool to help me edit a piece of work (for example from 2000 words to 1500 words)?

Yes, you can; however, it is your responsibility to ensure that the final work is your own academic work, that it is still in your own words and style. You will also need to check which 500 words have been removed and ensure the accuracy of the remaining text.

Can I use an AI tool to help me improve my writing?

You can use a Generative AI tool to improve text that you have already written. It is important that you only input your own text and that you check the output from a Generative AI tool and edit where needed so that it is in your own words and reflects your original meaning and style.

How can I avoid committing plagiarism when using AI tools in an academic context?

Avoid copying and pasting directly from an AI tool. Write in your own words, and properly cite and attribute any material and ideas you have used from outside sources (including Generative AI) giving credit to the original authors.

Verify any information. Text produced by a Generative AI tool may contain factual errors so it is important to fact check any information with the original sources to confirm its accuracy before you use it in your work.

## How do I cite Al tools?

At the end of your work, you should provide a description of the Generative Al tool used, stating how the information was generated and the date you accessed the tool.

You should include a list of prompts/sub questions used at the end of your references.

#### How do I Fact Check the output of an AI tool?

You would fact check the output in much the same way as you would any information you use. You should find the original source and check what was actually written/published.

Currently Generative AI tools don't provide urls of the sources; references that are provided often have incorrect authors/dates/places of publication, confused types (e.g mixing up books and Journal articles) or are completely made up. You need to check any citations provided by a Generative AI tool and verify that they are correct.

Information found on Wikipedia is not error free and the same level of scepticism and factual checking should also be used for Generative AI outputs.

# If I use an AI tool, what information should I keep?

You should be able to keep a list of the prompts used and the output generated with many AI tools. If there are ever any concerns about the authenticity of your work, this will be important in demonstrating academic integrity/ownership of the work.

It is also advisable to keep screenshots of Generative AI outputs if information can't be replicated.

## Do I have to pay to use an AI tool?

Many AI tools have both free and paid-for version of their software. The University does not support paying for access to any AI tool.

With some free versions, you may have the option to create a free-to-use account – this may help with keeping a record of your prompts and outputs.

## Why do I need to write essays when there are text-based AI tools?

Hopefully essays will not be the only form of assessment that you do. However, they do provide a range of skills such as carrying out research, synthesising information from multiple sources and developing your critical thinking skills. You need to remember that you need knowledge to assess information for bias and accuracy. You need to learn how to trust your sources of information and use AI outputs with scepticism.

## What is prompt engineering?

Prompt engineering is a way of communicating with a Generative AI tool. Your question (prompt) will provide the instruction to the tool as to what information you need to generate. The quality of the output generated will depend on the quality of the prompt that you used.

For example if you are asking a Generative AI tool to summarise text, be clear about how long you want the summary to be or whether you want a specific number of bullet points.

#### Where can I learn more about AI?

You will be able to find more information here:

Artificial Intelligence – Academic Development at St Mary's Moodle: https://mymodules.stmarys.ac.uk/course/view.php?id=24486

Artificial Intelligence in Higher Education – Festival of Learning & Teaching 2025: https://livesmucac.sharepoint.com/sites/Festivaloutputstestpage/SitePages/SitePages

### References

Sallami D, Change, Y-C, Aimeur E 2024. From deception to detection: the dual roles of large language models in fake news. <u>2409.17416</u>