

A STUDENT GUIDE TO USING AI FOR UNIVERSITY WORK

Overview

Artificial Intelligence (AI) is a valuable tool, becoming ever more powerful almost by the day. In fact, in time, it's likely to move beyond being a simple instrument to becoming an integral part of many human processes. Clearly, amongst its growing number of applications is its potential role as a study and research aid. The university has no intention to impede, prevent or prohibit this.

A certain type of AI, often known as 'Generative AI' is of particular interest for academic students and staff. Various generative AIs such as 'ChatGPT', 'Gemini', 'Copilot', 'DALL-E', 'Stable Diffusion', 'Suno' and 'Sora' allow text, images, sound and video to be produced 'on demand' in response to certain questions or prompts. This is an exciting technological development but also a potential concern.

There is no good reason, in this day and age, why all researchers, developers, designers and artists, including students, should not use AI, including generative AI, to enhance their studies and widen the scope and scale of their inspiration, information seeking and understanding. A guiding rule of this *use of AI*, however, is simply that it should be *ethical*, which essentially means being *responsible* and *honest*.

The most likely way in which your *use of AI*, particularly generative AI, could be *unethical*, *irresponsible* or *dishonest* would be if you used AI to produce material and then tried to submit this material as if it was your own work. This would apply if *any, some, or all* of your submitted work was generated by AI. Do not do this!

In many ways, ideas, information, and other material, gathered from AI sources should be treated in a similar manner to that found in an academic repository, gallery or similar conventional source. There are, however, two significant differences:

1. The original source of the material may be difficult to establish, reference or verify, and
2. There is a higher likelihood of the information being irrelevant, misrepresented, out-of-date, inaccurate or incorrect.

Never mistake a nicely worded AI response for a good one!

AI generated material can perhaps be considered in a similar light to that of Wikipedia or other online knowledge bases. Much like Wikipedia, AI should be considered as a potentially excellent starting point for initial research and ideas but very definitely not an end product!

However, having produced your own material responsibly and honestly, and correctly referenced your sources, you *may* legitimately find AI useful in checking your work and suggesting possible improvements.

These guidance notes can be considered as a natural extension to existing ARUCAD academic regulations concerning unfair practice.

Benefits of AI for Student Assignments

Let's start with the positives! There are many things AI is good at, and you might find useful, for example:

- A starting point for understanding assignment work you've been set: pointers to key search terms, for example.
- Getting ideas or inspiration for artwork, images, video, audio, etc.
- Having new or difficult concepts explained to you in ways or contexts that make sense to you individually.

- Clarifying or answering questions about material you've found through conventional search/research means.
- Experimenting with, and getting ideas for, different ways to deliver your work: the structure of written reports, for example, or presentation of artwork.
- Reviewing and critiquing your work, looking for errors or mistakes, and suggesting improvements.
- Helping you correct or improve your English: spelling, grammar, etc.
- For the programmers: helping to work out what's wrong with your code.

There's no problem with you using AI in any of these ways! However ...

Problems with AI Generated Information

AI is a remarkable tool for students and researchers and the information it provides can be very valuable. Unfortunately, it can be far from perfect. Limitations include:

- AI's 'knowledge' is restricted to what it can find on the Internet and what it's been trained to look for. This can be less comprehensive than you might think and certainly could exclude some very valuable material from your research.
- AI can be simply *wrong*: in some situations, quite a lot of the of the time! AI can be prone to 'hallucinate': not quite grasping reality or 'guessing': filling in gaps where it doesn't know.
- Some of the information current generative AIs work with was collected in the past so it could be out-of-date. Worse, the AI may attempt to 'construct' answers for anything that happened in the meantime and it generally doesn't get this right.
- Aside from its original 'training', much AI updating is limited. No-one will have checked or verified the information it produces for you: no-one can really, apart from you that is!
- AI will always interpret your instructions in a certain way. Asking the right question of AI is a learned skill, which comes with experience. There can often be situations in which AI misunderstands you and returns irrelevant information.
- AI can be particularly poor for information, or other material, that is scarcer on the Internet: narrow fields that are less researched or less looked for.
- It's a feature of the 'fuzzy' or 'non-deterministic' nature of AI that it can be unpredictable. It can often give different responses to the same question asked a number of times.
- AI is trained by volume of material. As a result, it can be prone to bias in terms of gender, race, etc., or make philosophically or politically Western assumptions.
- AI won't always tell you where it got its material from. So it can be hard or impossible for you to critically analyse it or establish and verify the source.
- Even though, in principle, AI produces 'original material', there can be examples where it relies heavily on a small number of – often similar – sources. So it's still quite possible for it to match plagiarism detectors or infringe copyright.
- When work is marked, it's a lot easier than you might think to determine if material has been produced by AI!

Be warned! The unthinking use of AI can be very problematic indeed!

Guidelines for Using AI for Student Assignments

All work submitted by students must be original and their own. However, used correctly, AI can actually *help* you with this – in many ways! For example, responsible use of AI in the preparation of your work could include the following:

- **It's OK** to use AI as a starting point for your work: use it to explain something you don't understand or have it clarified in a particular context.
- **It's OK** to use AI to get ideas, examples or inspiration for your own work: maybe for non-text material such as images, audio, video, etc.

- **It's OK** to use AI to identify search terms that you can use for more conventional research, so you can locate original sources, then use these sources to find other sources, etc.
- **It's OK** to use AI to clarify or explain this original material in a way that you find useful, or in a particular context.
- **But this is the part you have to do yourself; without AI:**
 - Develop original material *of your own* in line with the assignment instructions you've been given.
 - Determine the presentation of *your material* in a structure or form that best suits the task.
 - Write your report, or otherwise produce your material, *yourself*, always acknowledging and/or paraphrasing the work of others.
 - Always find and use the correct and original citation or acknowledgement details for any material that your work refers to.
- Once you've produced your original material, **it's OK** to use AI to check through your work for spelling, grammar, structure, etc. and make suggestions for improvement.

Inappropriate Use of AI and Consequences

So it's actually quite simple to stay on the right side of the ethical AI line! Or, turning it around, just avoid these basic, but essential, problems:

- **Do not** ask AI to write or produce *anything* for you to use as your own. This applies to text, images, audio, video or any other material.
- **Do not** copy/paste any material (text, images, sound, video or anything else), from AI or anywhere else, and present it as your own.
- **Do not** use *any* material without citing its exact source in a form that can be independently verified.

These rules apply irrespective of whether the AI material would form a small part of your submitted work, a larger part, or all of it. You simply cannot submit any AI-generated material as if it was your own or without full transparency.

It can be quite easy to determine whether submitted material has been produced by AI. Student work found to have been produced through the unethical, irresponsible or dishonest use of AI will subject the student to the university's disciplinary procedures, which could result in academic penalties or expulsion.

Summary

Artificial Intelligence is here to stay and the University has absolutely no wish to exclude such a powerful resource from the academic environment and experience. There are many ways in which AI can enhance your student journey towards your qualification. However, students attend university to develop themselves as individuals, not to bypass this development process through technology. Abiding by these simple guidelines – using AI ethically, responsibly and honestly – will strengthen your work fairly without exposing yourself to accusations of academic misconduct and its consequences.