

Generative AI Tools – Physics Department Guidance

Background

Generative Artificial Intelligence (GAI) tools, such as ChatGPT, Scribe, GitHub Copilot, etc., are becoming ubiquitous in industry and academia. These tools can help carry out research, increase understanding, and improve output. However, serious risks are involved if misused or used without carefully reviewing the outputs. We outline some general points based on the latest College Guidance on [Generative AI Tools](#).

- AI models are powerful and can be used effectively to check the quality of your written work, prompt new ideas, or generate simplified explanations of complex topics to support your learning. However, the models display limited success in handling mathematical information, scientific evidence, and code. The training of the models is based on limited, sometimes stale information. The predictive nature of the AI models means they often cannot distinguish between accurate references and fabrications. Therefore, it can often return incorrect, irrelevant, or false information.
- Submitting work and assessments created by someone or something else as if it were your own is plagiarism and is a form of cheating. This includes AI-generated content. Please refer to the College's [Academic Misconduct Policy](#) for more information (see also [Physics Plagiarism Guidance](#)).
- Increasingly sophisticated “AI detection tools” are available. These can spot the use of GAI tools in submitted work. The College will use these tools routinely. To ensure quality assurance is maintained, the Department may invite a random selection of students to 'authenticity interviews' on their submitted assessments.

Guidance for all students submitting academic work

Academic integrity has, and always will be, a core principle in academia. The use of AI models is simply another tool that will be held to account against this principle. Remember, it is the student's responsibility to use GAI tools correctly. Follow these rules if you use GAI or other AI tools.

1. **Verify.** Research the statements and find the sources. You must reference sources for the content generated (including whatever GAI tool you used and an outline of your input to it) and verify the GAI's output (which may be incorrect, irrelevant, or which may itself be presenting the work of others without appropriate acknowledgement). The responsibility for verification of correctness and avoidance of plagiarism is yours alone. If you plagiarise or use unattributed results or content, even unwittingly, you will fall foul of the College's Academic Misconduct Policy.
2. **Review & edit.** Any content created with the help of GAI tools must be appropriate. For example, your work must be written in a style appropriate for the intended purpose or learning outcome. Scientific reports should be written in a concise and precise scientific style without making unsupported assertions. If the style or content of any submitted work is inappropriate, you will lose marks. Thus, GAI output may need significant editing before submission. It is particularly easy to spot the use of GAI tools in narrative content. If you have not acknowledged the use of GAI or other AI tools, you will be challenged in these cases.
3. **Acknowledge.** You must declare the use of GAI or other AI tools when producing academic work. All tools will have standard acknowledgement statements you can include to attribute their use. You cannot submit work generated by GAI for assessment and present it as yours. Doing so is against the College's Academic Misconduct Policy. In many cases, even acknowledgement is not sufficient. For example, if the learning objective is to summarise a scientific paper, you cannot simply use GAI to do this for you.

AI detection tools will be used. Be safe and acknowledge the use of any AI tools.