# Getting started with GenAl at GCU

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## **GCU** context



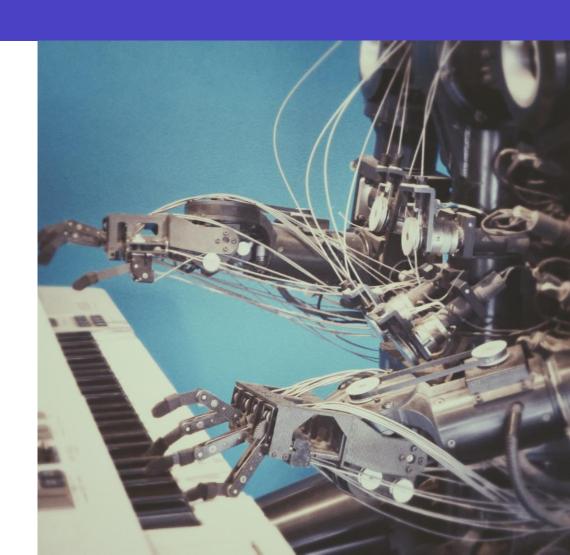
- Largest post-92 institution in Scotland
- High percentage of professional and vocational programmes
- Russell Group principles emphasis on supporting students to become responsible, ethical AI users, equipped for the workforce
- Varying levels of engagement with AI among academic staff
- Some additions made to Student Code of Conduct but more detailed institution-wide guidance and support materials still to come

- Library representation on University and Schoolwide working groups.
- Requests from academic staff to incorporate Al information into embedded sessions - generally focused on ethical use, shortcomings etc.
- Support for academic integrity investigations several academics have asked us to investigate submitted coursework, particularly reference lists and in-text citations.
  - In cases where tools like ChatGPT have been used, there are often a mixture of real and hallucinated references.

# Support for staff

## Hallucinated references

- GenAl tools like ChatGPT can create hallucinated references - information and references that sound plausible, but are made up (Day, 2023).
- When completing a query, LLMs 'select one of the appropriate words that are syntactically and semantically appropriate' (Stoffelbauer, 2023) - not necessarily the correct information, just words that look correct.
- Hallucinated references often appear credible but on further investigation do not exist.
- Author names often among most common worldwide, where present DOIs don't work or link to unrelated resources, titles often simultaneously very specific yet generic.



# Traffic light system



# Support for students



- Students come to the Library because they expect library staff to be knowledgeable about AI.
- There is limited knowledge of the Code of Conduct among students.
- Students still often seem unaware of shortcomings (e.g. hallucinated references) and expect AI tools to provide factually correct answers all the time.
- Hallucination rates are lower for newer tools (Agrawal et al., 2024) but it's likely students will continue to use free, less reliable versions.

#### What next?

- Impact of forthcoming institutional student guidance remains to be seen
- Possible future adoption of Microsoft Copilot
- Further development of library staff expertise needed
- Reexamination of how we teach referencing and information evaluation

#### References

Agrawal, A.K. *et al.* (2024) 'Do Language Models Know When They're Hallucinating References?', *ArXiv*. Available at: <a href="https://doi.org/10.48550/arXiv.2305.18248">https://doi.org/10.48550/arXiv.2305.18248</a>

Day, T. (2023) 'A preliminary investigation of fake peer-reviewed citations and references generated by ChatGPT', *The Professional Geographer*, 75(6), pp.1024-1027. Available at: <a href="https://doi.org/10.1080/00330124.2023.2190373">https://doi.org/10.1080/00330124.2023.2190373</a>

Stoffelbauer, A. (2023) *How Large Language Models Work: from zero to ChatGPT*. Available at: <a href="https://medium.com/data-science-at-microsoft/how-large-language-models-work-91c362f5b78f">https://medium.com/data-science-at-microsoft/how-large-language-models-work-91c362f5b78f</a>