Research Integrity and Ethics:

Guidance for Using Generative AI Tools in Research

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Easy-Read Summary of this guidance

What's This About?

This guide helps BSU researchers (staff and students) use Generative AI (GenAI) tools—like ChatGPT or image generators—safely, ethically, and responsibly in research. It supports innovation while protecting data, people, and intellectual property.

Key Principles

BSU's 5 Research Integrity Values:

- 1. Honesty
 - 2. Rigour
 - 3. Transparency
 - 4. Care and Respect
 - 5. Accountability

These apply to all research, including when using GenAl tools.

What is GenAl?

GenAl tools create content (text, images, code, etc.) based on patterns in data. They can help with writing, analysis, and more—but come with risks.

Risks to Watch Out For

- Sharing personal or confidential data
- Breaching copyright or funder rules
- Introducing bias or errors
- Misrepresenting Al-generated content
- Environmental impact

Always ask: Is this tool necessary? Is it safe? Is it ethical?



Before Using GenAl:

- Check if the tool is approved by BSU
- Complete a Data Protection Impact Assessment (DPIA) if needed
- Get ethical approval if GenAl is part of your research design
- Avoid entering personal, sensitive, or third-party data unless absolutely necessary and approved

When Using GenAl:

- Be transparent—explain how and why you're using it
- Use it only when it adds value to your research
- Keep records of prompts, tools used, and outputs
- Don't list GenAl as an author on publications

Ethical Approval & Data Management

- Full ethical approval is needed for most GenAl use in research
- Include GenAl use in your Data Management Plan (DMP)
- Be cautious with literature reviews—GenAl can "hallucinate" false sources

Sustainability & Environment

GenAl tools use a lot of energy and resources. Use them only when:

- They're essential
- They bring clear benefits
- You've considered environmental impact

Intellectual Property (IP) & Copyright

- Don't enter BSU or third-party IP into GenAl tools without permission
- Be careful with Creative Commons content—only CC0 is safe without extra consent
- If your research might be patentable, don't use GenAl until you've spoken to BSU's Legal or Research Support teams

External Funding & Collaboration

- Check funder policies on GenAl use
- Be transparent in funding applications
- Get consent from collaborators before using their data or IP in GenAl tools

Where to Get Help

- BSU Al Policy & Ethics Guidance: https://www.bathspa.ac.uk/artificial-intelligence/
- Library Team: For copyright and licensing advice
- Research Support Office: For funding and patents
- Legal Services: For IP and contracts
- Ethics Committee: For ethical approval and DPIA

Introduction

BSU is committed to providing support and protecting researchers in their use of Generative Artificial Intelligence (GenAI) tools. As stated by the <u>Information</u> <u>Commissioner's Office (ICO)</u>, "Applications of artificial intelligence (AI) increasingly permeate many aspects of our lives. We understand the distinct benefits that AI can bring, but also the risks it can pose to the rights and freedoms of individuals".

The University has an institutional Artificial Intelligence (AI) Policy. This supplementary guidance aims to ensure BSU Researchers can engage with, and benefit from, the opportunities GenAI tools present for research purposes, adhere to the institutional policy, and protect them against potential ethical, legal and integrity issues to ensure that all Research involving GenAI tools undertaken by BSU staff and students is carried out to the highest professional standards of research integrity. When we talk about Research using GenAI tools – we are referring to the use of such tools being embedded into the research design (data collection/analysis/writing). We are not referring to it in the context of the wider use of such tools as productivity aids (e.g. scheduling, organising thoughts etc). There are existing more appropriate sources of guidance for these kinds of usages, such as those provided by the Academic Skills service (ASk), although it should be noted that research funders and publishers do have policies relating to such usage, which this guidance does cover.

In addition to the BSU Al policy, Researchers using GenAl tools or conducting research about GenAl tools must have due regard to the BSU's principles of Research Integrity as detailed in in our <u>Integrity and Ethics Guidance</u>.

BSU's five principles of research integrity – in line with our institutional commitments as a supporter for the Concordat to Support Research Integrity - are:

- Honesty
- Rigour
- Transparency and open communication
- Care and Respect
- Accountability

Just like any other research integrity and ethical dimension, these core principles apply to our use of GenAl tools in our research and scholarly practice.

Purpose of this guidance

This guidance re-iterates the University's position on the use of GenAl tools as outlined within the <u>Artificial Intelligence (Al) Policy</u>, and frames the principles of this policy into specific guidance for any BSU-affiliated researcher (Staff or Student) seeking to undertake Research, Innovation activities and Scholarly Activity utilising GenAl tools as an embedded element of the research design. It applies to all academic, research, professional services staff groups and all students.

This guidance should be read in conjunction with the over-arching BSU Artificial Intelligence Policy, as well as other Research-related policies, guidelines and procedures including but not limited to:

BSU Policies, Guidelines and Procedures:

- BSU Artificial Intelligence (AI) Policy
- Bath Spa University Code of Good Practice for Research
- BSU Intellectual Property (IP) Policy
- Integrity and Ethics: Forms, Policies, and Resources
- Guidance for BSU Researchers working with under 18s and Adults at Risk
- BSU Safeguarding Policy
- Policy for Retrospective Ethical Approval
- Guidance for Applicants for full ethical approval
- Research Integrity and Ethics Annual Compliance Statements
- Research Data Policy
- Open Access Policy
- Academic Integrity Policy
- How to Use AI as a Student

External Policies, Guidelines and Procedures:

- Concordat to Support Research Integrity
- Trusted Research Guidance for Academia

This guidance is not designed to restrict Research or academic innovation, but to support Researchers in safely planning their activities and exercising reasonable caution when planning to involve a GenAl tool in their practice. It is designed to signpost Researchers to further advice and information both within BSU and more widely.

The University recognises that the use of GenAl tools is a rapidly evolving field, with the pace of growth in their use and deployment often outpacing our everyday understanding. We also appreciate that GenAl tools and their usage have sustainability

and environmental implications that need careful balancing with our desire to embrace the rapidly growing use of these tools and the potential for innovation that they offer. This guidance is "AI tool neutral", although it should be highlighted that beyond existing GenAI tools already licensed by BSU, new or untested tools should go through formal approval prior to their use for research purposes. The onus of this guidance is to encourage researchers to consider the wider ethical and research integrity principles underpinning the use of *any* GenAI tool, and give them the guidance they need to consider and articulate this within the context of their research project as part of ethical approval and their wider academic responsibilities for modelling good research integrity practices.

GenAl tools should be considered with the same ethical rigour as any other element of research design, and it is an expectation that Researchers are able to articulate the use of such tools clearly within their application for ethical approval. It is generally expected that any tool referred to for use within an application for ethical approval has already been through the required software approval process for the University. More broadly, careful consideration needs to be given towards the ethical implications of using such tools.

What does this guidance cover?

This guidance applies equally to all BSU Researchers (students and staff) and their teams using GenAl tools in support of their Research or Innovation activities, and Researchers undertaking the development and/or training of Al systems. It applies irrespective of the source of any funds for the Research and covers all uses.

The guidance touches upon Intellectual Property, (including copyright) owned by any third party or by BSU. The review and approval processes and timelines for the proposed use of a GenAl tool to mitigate the risks will be different depending on the location, method and type of GenAl tool being proposed.

Definitions Used

Descriptor	Definition
Data	A reinterpretable representation of information in a formalized
	manner suitable for communication, interpretation, or processing.
	This definition is used by the <u>Digital Curation Centre</u> .
Confidential	Any information disclosed by one legal entity to another and either a)
Data	identified as confidential before or at the time of disclosure, or b)
	which, by its nature or from the circumstances of its disclosure,
	should reasonably be presumed to be confidential. It includes
	commercially sensitive data, which is defined as any information
	which could damage commercial interests.
Personal	This is defined as within the UK GDPR Article 4(1), as 'any
Data	information relating to an identified or identifiable natural person
	('Data subject'); an identifiable natural person is one who can be

	identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location Data, an online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person'.
Research Data	The evidence that underpins the answer to a particular research question and can be used to validate findings from that research.
Special Category Data	Also known as "Sensitive Data". See the definition of Special Category Data provided by the <u>Independent Commissioners Office</u> (ICO). You can only process Special category Data if you can meet one of the specific conditions in Article 9 of the UK GDPR.
Third Party Data	Data belonging to or being provided by a person / organisation that does not belong or is not controlled by BSU (staff or students).
Business Critical Data	Data that BSU deems essential for its success and that could cause BSU harm should it be published.
Generative Artificial Intelligence (GenAI)	Any type of artificial intelligence system that identifies patterns and structures in Data / information / material and generates content, including: audio, code, images, text, simulations, and videos in response to instructions ('prompts') that resembles human-created content. GenAl tools can be trained on large language models (LLMs). These models are the algorithmic basis for generative Al tools such as ChatGPT and Gemini.
Innovation	For the purposes of this Policy, Innovation is defined by UK Research and Innovation (UKRI) as the application of knowledge of ideas for the development of products, services or processes – whether in business, public services, or non-profit sectors. At BSU this may include but is not limited to: Research, consultancy, contract Research, licensing of Intellectual Property to third parties (including all licensing of materials outside normal academic practice, such as licensing toolkits, questionnaires etc, whether using Creative Commons or other licences), setting up spin-out companies, filing patents and working collaboratively with third parties for strategic benefit to BSU.
Intellectual Property (IP)	Intellectual Property is the term used to describe creative outputs that can be legally protected arising from literary, artistic, industrial and scientific endeavors, such as the results arising from Research or creative projects. Intellectual Property includes, but may not be limited to, patents, design rights, registered designs, trademarks and service marks, and all similar property rights (whether registered or not) including those subsisting in any invention, improvement, knowhow, patent, design, process, information, plant varieties, copyright work (including without limitation rights in and to technical processes, systems, methods, software design, algorithms, code, scripts or other computer software), rights in databases, topography right, domain

	name, trade mark, trade name or get-up or application to register any such right.
Research	Research is broadly defined as any gathering of Data, information and facts for the advancement of knowledge, including scholarship activities. The lifecycle of Research includes the planning and Research design stage, the period of funding for a funded project or the duration of the Research collaborations for those projects that do not receive external funding, and all activities that relate to the project during this time. This includes knowledge exchange and impact activities; the dissemination process, including reporting and publication (including Creative Commons and other such licensing); the archiving, future use, sharing and linking of Data; and the protecting and other future Research use of the outputs of Research.
Researcher	 All staff employed by the University (including academic, research and support staff) carrying out Research at, or on behalf of, the University (including those on a BSU contract / payroll but based elsewhere, for example at a partner institution). All students (undergraduate, postgraduate taught, postgraduate research) undertaking Research and their supervisors (including students registered at BSU but based elsewhere, for example at a partner institution). Any persons with Honorary positions or Emeritus appointments, conducting Research at, or on behalf of, the University. Any other individuals carrying out Research at, or on behalf of, the University.

Risks for Researchers and Research Activity

Researchers must consider all risks that may be relevant to their research that arise from the involvement of GenAl tools within their research design. Below is a non-exhaustive list of identified risks which, in complying with this guidance, are possible to mitigate against:

- Damaging academic and Research integrity.
- Exposing Research results prior to publication or to any Intellectual Property protection being in place.
- Breaching funder terms and conditions where external funds are applied.
- Breaching third party confidentiality agreements.
- Breaching Intellectual Property restrictions.
- Breaching ethical standards.
- Harm to individuals.
- Unintended introduction of biases into Research analysis, affecting the scholarly record through Research outputs and publications including theses and dissertations.
- Factually incorrect assessment of Research analysis and results.
- Personal Data being used inappropriately or being kept on servers outside of the UK.
- Sharing of Confidential, Special Category, Third Party, or BSU Business Critical Data (for example, anything related to results, Innovations and patents).
- Unintended or inadvertent sharing of AI generated Data with other organisations.
- Inappropriate reuse and misrepresentation of staff and student work, the Data collected or the Research results.
- Incorrect or inappropriate authorship status for Al generated Data used in publications.
- Incorrect referencing of the contribution of Al.
- Exposing Data that could be used to breach cyber security, hacking etc.
- Contravening BSU's insurance.
- Non-compliance with Data Protection legislation, the National Security and Investment Act 2021 or Export Control regulation.
- Detrimental effects on national / international collaborations and the University's global research reputation.
- Sustainability and Environmental concerns.
- The risk of data input into GenAl tools inadvertently being used to train GenAl commercial training models without our knowledge

Researchers must take all reasonable precautions to prevent or diminish loss, destruction or damage or any occurrence or cease any activity which may give rise to liability to ensure their activities are covered by the University's Insurers.

As a key principle – the use of GenAl tools in research at BSU should be transparent, proportionate, appropriate, and enhance the quality and integrity of the research. It should not be used "for the sake of it" without a clear rationale

for what the usage is bringing to the research outcomes (in terms of outputs, benefits and positive impact) – and the onus is on the researcher to demonstrate via ethical approval the benefits that the use of these tools bring.

GenAl at Bath Spa University

BSU is actively engaging in the use of GenAl tools, but by nature the pace of growth in this field means that it is impossible to list all the latest developments and mechanisms directly within this guidance.

BSU has put together a micro-site that outlines all of our core guidance, policy and frameworks for engaging with GenAl tools – as well as information about specific tools and projects developing - in one place:

https://www.bathspa.ac.uk/artificial-intelligence/

Key Principles for Using GenAl

Researchers should exercise caution and adopt responsible practices when utilising GenAl tools. At a high level, the first considerations are:

- Never enter sensitive company data or personal information into an unapproved AI tool.
- Event if the tool has institutional approval read and understand usage terms, and ensure everybody (including your participants) understands these terms to ensure they can give demonstrably informed consent.
- Secure your accounts with strong, unique passwords and two-factor authentication.
- Data returned may not be error free: develop an approach to checking and assuring data quality in any interactions with a GenAl Tool.
- Data entered into a GenAl tool should be entered with a specific purpose, that is transparent, with every effort made to minimise unnecessary data being input.
- Ethical Approval and Data Management Plans should articulate clearly the purpose, benefit and rationale for using such tools.
- GenAl tools should be used "with purpose" their use should be adding to the research approach and/or quality of outputs with a clear rationale. The principle of transparency applies.

Researchers should also be mindful of the following legal aspects in line with the UK General Data Protection Regulations (UK GDPR) when employing GenAl Tools:

Data Protection

Privacy	GenAl tools may collect and process Personal Data, raising concerns about privacy. It is essential for Researchers to review the privacy policy of the GenAl tool provider and the privacy settings of the tool to ensure compliance with relevant Data Protection regulations.	
Data Accuracy	Researchers must take all reasonable steps to make sure that any Personal Data that is entered into a GenAl tool, is not "incorrect or misleading as to any matter of fact"	
Transferring and/or accessing Personal Data outside of the UK	Researchers must discuss entering Personal Data into a GenAl tool outside the UK with the University's Compliance Teams. Usually the Privacy Policy will outline where in the world the tool is hosted, and where it may transfer data.	
Data Security	Researchers should always check the security settings of the GenAl tool.	
Automated decision-making (such as algorithms) including profiling:	 The UK GDPR has provisions on: automated individual decision-making (making a decision solely by automated means without any human involvement); and profiling (automated processing of Personal Data to evaluate certain things about an individual). Profiling can be part of an automated decision-making process. 	

A key question for Researchers to ask when using GenAl in the context of decision-making is whether the decision is wholly automated or not. The UK GDPR prohibits solely automated decisions that have legal or similarly significant effects on individuals, with certain exceptions.

A Data Protection Impact Assessment (DPIA) is required by law if you input Personal Data where the processing of the Personal Data is likely to result in a high risk to the rights and freedoms of individual data subjects. Even if you are not inputting Personal Data, the University requests a DPIA screening before you use an unapproved GenAl tool. For further information, refer to the Sharepoint pages: DPIA (Data Protection Impact Assessment)

A DPIA, and any other institutional approvals required, should be in place for the GenAl tool prior to research ethical approval taking place. The standard policy of any research project requiring ethical approval to be in place prior to data collection commencing

applies. This means you may need to allow additional time in addition to ethical approval in your project planning.

- Information Security: GenAl tools may be susceptible to cyberattacks, potentially exposing sensitive information. Researchers must employ robust cybersecurity measures to protect Data and systems, and will need to check that these measures are in place before using the GenAl tool. For further advice, contact the Governance, Legal and Compliance Team: Information Compliance Team
- **Copyright and patents:** GenAl tools may use Data/information/material and generate content that infringes upon copyright laws.
- **Patents**: There are also considerations when using GenAl tools for any Research that may be patentable.
- Intellectual Property: Researchers must carefully consider the Intellectual Property implications of using a GenAl tool
- Researchers should check the GenAl providers' terms and conditions
 regarding training of models. As GenAl models evolve, GenAl providers are
 adapting their terms and conditions to allow them to retain information entered
 into their products for model training purposes. Researchers must scrutinise the
 terms and conditions of the GenAl providers carefully to understand their rights
 and limitations.
- Biases: GenAl tools can inadvertently perpetuate or amplify societal biases due
 to biased training Data or algorithmic design. To minimise discrimination and
 ensure fairness, it is crucial for Researchers to mitigate against the GenAl tool
 creating biases or discriminatory outcomes at the point of application by, for
 example, carefully checking the quality of the Data for any biases
- Anonymity: Due to the large amounts of Data being processed by GenAl tools, it is easy for Researchers to inadvertently use or reveal sensitive information hidden among anonymised Data in the tool. Researchers should be careful to only input the minimum amount of anonymised Data they need for their Research purposes to reduce the likelihood of a 'linkage' between datasets in the GenAl tool, that could enable re-identification of anonymous Data records.
- Environment and Sustainability: It is important to note that GenAl tools often carry wider sustainability and environmental considerations use of such tools should therefore be considered carefully in balance with our desire to ensure sustainable and environmentally responsible research practice. This includes ensuring that the use of GenAl tools in our research is necessary, adds value, and that its usage is tailored, appropriate, and proportionate.

Requirements for Researchers

- Researchers and their teams must apply caution in relation to the use of GenAl
 tools within research and stay up to date with the policies, processes and
 guidance both from within BSU, the terms laid out by any external funders,
 external ethics and governance committees and all other relevant laws and
 regulations in regard to GenAl.
- Researchers must ensure that approval for the use of specific tools is in place at BSU before incorporating that tool into their application for ethical approval.
- Researchers must take full responsibility for the use of GenAl tools in their Research and any Data/information/material they have entered into those tools.
- The University strongly advises Researchers not to enter any Personal (including Special Category Personal Data), Confidential, Third Party, or BSU Business Critical, Data/information/ material into a GenAl tool until the general Data privacy and security aspects of GenAl tools are more established.
- However, there may be exceptional circumstances where this is appropriate, and would need to be discussed on a case-by-case basis with the University Ethics Committee (UEC) and the Governance, Legal and Compliance team. The University also recommends no patentable Research is input into a GenAl tool.
- Researchers need to ensure the necessary permissions are in place for them to input any Data/information / material legally into the GenAl tool.
- Researchers should only enter third party content, including copyrighted
 material, into a GenAl tool when informed consent is granted from the owner of
 that Intellectual Property, even if content is made available by licences such as
 Creative Commons.

GenAl use must be declared and clearly explained as a part of any mechanisms for informed consent built into your research design. Participants and all stakeholders need to understand what any data they provide you with is going to be used for by the GenAl tool. Researchers must act with integrity and responsibility to ensure the originality, validity, reliability and integrity of outputs created or modified by GenAl tools.

Guidance for External Funding Applications

- Applicants should ensure that they comply with individual funder requirements about the use of GenAl tools in funding applications – refer to application guidance and funder policies carefully in formulating your application.
- Researchers are required to engage with the Pre Award team within the Research Support Office (RSO) in formulating any external funding application to a research funder, either as lead or as a partner: Research Funding Guidance
- The Research Funders Policy Group predominantly made up of science and health research funders in the UK – have published a joint statement on the use of GenAl tools in funding applications and assessment. This can be read here.

- The statement, published in September 2023, sets out high level expectations
 while members develop their own individual funding policies. You must check the
 relevant funder website for specific restrictions they may have, as funder-specific
 policies in this area are still emerging.
- <u>UK Research and Innovation (UKRI)</u> have published their position on the use of GenAl in the application and assessment process for UKRI funding opportunities in their policy: <u>Policy on the Use of generative artificial intelligence in application</u> preparation and assessment
- Even if a funder does not provide specific guidance, we recommend that you are transparent where you have used GenAl tools in the development of your application, and that you adopt the principles of the UKRI policy to inform your approach in lieu of any funder-specific guidance

Ethical Review and Approval

- The University Ethics Committee (UEC) requires that all projects undertaken by BSU staff and students or involving BSU that involve the use of GenAI tools in data collection and/or analysis, or that are developing a GenAI tool must seek full ethical approval (Stage 2 ethics) before starting that Research.
- Review or as a general productivity aid (for example, helping to create scheduling, organise your thoughts, or for the kinds of general productivity purposes outlined within BSU's guidance on the user of generative AI) although even in these cases, researchers must still be mindful of the key considerations as per above. Even if full ethical approval isn't required for simply using GenAI to support Literature Review, researchers need to be aware that GenAI tools can "hallucinate" non-existent sources, are often opaque about their data sources, and they do not generally provide un-edited access to scholarly research or full text as originally presented. Any use of GenAI tools within Literature Review should be in conjunction with a clear protocol in place for quality checking and utilised in conjunction with traditional research methods for quality control and transparency. The tool must also have been approved for institutional use prior to using it for this purpose.
- This requirement has been put in place while the University is developing its knowledge and expertise of the many aspects of GenAl relating to Research, but also to develop our understanding of how Researchers are hoping to use GenAl tools, and for what purposes. The involvement of a GenAl tool in a project, purely by way of gathering information about that tool, but does not actually use a GenAl tool, does not necessitate a full ethics review for the GenAl aspect of the Research (the normal BSU ethics review requirements will apply here, and other factors in the research design may still necessitate full ethical approval).
- Currently, the University Ethics Committee strongly advises that Researchers
 do not enter any Personal including Special category Personal Data),
 Confidential, Third Party, or BSU Business Critical Data / information /
 material into a GenAl tool until the general Data privacy and security aspects
 of GenAl tools are more established. If the tool has not been approved for use
 within BSU, then it should not be utilised.
- Ethical and societal risks of GenAl Research can manifest at different stages
 of Research. GenAl Research has therefore moved the singular moment of
 ethics approval at BSU to a dynamic ethics review process, potentially
 requiring multiple amendment requests from the applicant(s). UEC has
 agreed that currently, the maximum length of ethics approval for a study
 involving a GenAl tool is six months in the first instance.
- <u>Prior to seeking BSU ethics review</u>, Researchers must have the approval in place for the GenAl tool they are planning to use. As part of this, Researchers

will need to have conducted a DPIA for the involvement of that GenAl tool. Discussions with the BSU Compliance and IT teams to discuss any potential Intellectual Property infringements / issues must also have taken place prior to seeking BSU ethics review. If this is not in place at the point of ethical approval, then any approvals given via the University Ethical Approval Process will be subject to conditions that approval is completed before the research can commence.

Researchers therefore need to consider the time required to undertake these
existing BSU governance processes, in addition to planning for the time it
takes to complete the BSU ethics review process.

Sustainability and Environmental Considerations

The sustainability and environmental debates around GenAl tools are well documented, but the knowledge base is still developing, and the technology is moving so rapidly our understanding of these impacts is continually evolving. BSU recognises that there is evidence which suggests GenAl tools carry both sustainability and environmental considerations, and indeed concerns – including but not limited to:

- the size and scale of the data centres used to host and run them
- the amount of electronic and sometimes toxic waste generated by these data centres
- the amount of water used during construction and in cooling infrastructure to run GenAl tools
- the amount of energy that is used to continually run these tools.
- legitimate ethical concerns around how such tools collect and utilize data, and the ethical rigour about how that data has been checked and validated
- The potential of GenAl to negatively impact creators and copyright owners and risk the sustainability of certain sectors.

This is a rapidly evolving area, and many researchers (including those at BSU) are actively delivering research to better understand the nuance of these considerations. Conversely to the concerns identified above:

- There is evidence emerging that newer GenAl tools are developing more environmentally sustainable and ethical technologies to support the infrastructure that runs them. The more these tools are used, the more commercial incentives there are to ensure they are sustainable.
- There are wider questions and areas of research interest emerging around societal offset, the trade-offs (e.g. efficiencies that GenAl Tools offer alongside the potential drawbacks, and whether these offset the less positive sustainability and environmental impacts), and the potential environmental benefits GenAl tools can present holistically in our everyday practice and lives through the efficiencies and capabilities they potentially offer.
- These are still large and very active research questions and debates globally, which are evolving and changing rapidly.

 We therefore encourage researchers to consider these issues at a micro level in terms of the sustainability and environmental impact of their individual research proposal(s), whilst being mindful of the wider discussions, debates and emerging evidence in this area.

BSU is a signatory to the <u>Concordat for the Environmental Sustainability of Research and Innovation Practice</u>, and we recognise that it can be argued there is a tension between our ambition to embrace the emerging global use of GenAl tools in our practice and our commitments to sustainability and the environment. We understand that it can be difficult for researchers to navigate and reconcile these ambitions, given the sustainability and environmental concerns that GenAl tools can seem to present, and the rapidly evolving nature of our understanding of this topic means there is a level of uncertainty in how we plan to incorporate and use these tools whilst also modelling sustainable and environmentally sound research practices.

In formulating your individual research proposal, we encourage you to reflect upon, hone into, and articulate the following key principles in your application for ethical approval and in developing your research design to help manage these tensions within the context of your individual project. Consider the themes of:

1. Beneficence

Beneficence refers to the ethical principle that our research has a moral obligation to act in a way that benefits the world, promotes well-being and safety, and positively contributes towards the body of human knowledge. Any proposal utilizing GenAl tools should have clear and defined benefits to anybody engaged in the research and contribute positively towards the body of knowledge to justify the use of such tools. Consider and articulate the benefits that your research will bring in your application for ethical approval. This goes beyond simply using GenAl tools – this is best practice for any piece of research or academic activity.

2. Proportionality

The use of GenAl tools in your research design should always be proportionate and necessary to ensure the best possible outcomes for the research and that benefits outlined within ethical approval are delivered upon – mitigating the challenges around sustainable Al usage as much as possible by limiting its adoption to essential usages, and off-setting the sustainability concerns as much as possible through the creation of new knowledge/impacts/outcomes that have direct benefit to all of those engaged in the research and the wider community. Tools should only be used as much as is necessary, and in as limited ways as possible, to deliver the project outputs whilst minimising the risk level, in line with any other ethical consideration. Some funders – including the Wellcome Trust – offer opportunity to apply for carbon offset stimulus funding as part of your bid proposal to support environmentally friendly research delivery, so if you are applying for funding consider costing this appropriately within your bid proposal. You should also consider the wider environmental considerations of your proposal – such as considering ways you may reduce its overall carbon footprint – to try and mitigate the wider environmental impacts of your project.

3. Necessity

"Tokenistic" use of GenAl tools (e.g. uses that are not demonstrably required to support the delivery and realisation of benefits and outcomes for the research) as part of the research design is inherently unethical and will not be supported through ethical approval – because if use of the GenAl tool is not essential to deliver on the intended benefits and outcomes of the research, there will generally be more effective, less risky, and more streamlined ways of carrying out the proposed activities and delivering upon the outcomes you've stated that mitigate the risks that using GenAl tools present. It will always be expected that the use of GenAl tools is transparent, justified, and articulated within any application for ethical approval, with an onus on the researcher to articulate within their application for ethical approval that the use of the tool is required to achieve the particular stated objectives of the study or enhances the positive benefits to those engaged within it. The researcher should articulate the role of the GenAl tool in their research – and state why it is required to deliver on the research objectives (e.g. ensuring benefits are realised, conditions are met, or even if the research is possible without using such tools, considering factors such as time commitments). The principle of using GenAl tools "as much as is necessary, but in as limited ways as possible" applies.

- The University Ethics Committee will continually monitor developments in this space which may lead to amendments to this guidance and its requirements as appropriate.
 - We recommend that you reflect holistically on ways you can minimise the environmental impact of your research design and consider ways of embedding the principles of the Concordat for Environmental Sustainability into your practice.
 - Some further reading signposted below may help you to further reflect upon and identify some of these wider sustainability considerations within the context of your own research, and consider ways you could potentially further mitigate these challenges:

Concordat for the Environmental Sustainability of Research and Innovation Practice

European Union – legislation to temper the environmental impact of Al

UNESCO – Recommendations on the ethics of artificial intelligence

<u>United Nations Environment Programme – Al has an environmental problem. Here's</u> what the world can do about that

Responsible-ish GenAl dos and don'ts: text edition - https://www.careful.industries/blog/2025-4-responsible-ish-genai-dos-and-donts-text-edition

Data and Publications

- Researchers must detail any use of GenAl in collecting, analysing or otherwise processing Research Data in their Data Management Plan (DMP) relating to the Research. Researchers should explain the reasons for using a particular GenAl tool(s), including an evaluation of the risks associated with using that tool via your DMP documentation.
- The use of GenAl tools in the writing of publications and/or literature review should always be acknowledged.
- Researchers must include information in the documentation and / or metadata that accompanies any Data that have been generated using processes involving GenAl tools.
- Where practicable this should include naming the specific model(s) and software (including which version) used, when the tool was used, and specifying how content was generated, such as listing the prompt(s) used. This information must also be included in any publications or other outputs that report on such Data.

Authorship

- Authors are accountable for the accuracy, integrity and originality of their Research outputs, such as publications, including any use of GenAl.
- GenAl use must not breach the University Academic Integrity Policy,
- Research outputs must be the authors' own work, not presenting others' work or output from GenAl tools without appropriate citation and referencing.
- If you choose to copy and paste a large amount of text from GenAl, it is important to cite this correctly as outlined in Cite them Right.
- The following guidance video from BSU may be helpful: <u>Academic Integrity</u> and <u>GenAl</u>
- Individual journals and publishers may have more specific requirements or guidelines relating to reporting the use of GenAl and these must be followed where applicable.
- GenAl does not meet the BSU determination for authorship, given the need for accountability, and so GenAl tools must not be listed as an author on any Research publication referencing a BSU Researcher.
- Academic Skills Guidance for students on the use of generative Al

Using Repository Data in GenAl Tools

- Researchers using third party data as input into any GenAl tool must abide by any conditions for reuse specified for that material by the owner of the material.
- Where Data have been sourced from a repository or Data Centre, this
 includes following any guidelines provided by that repository/centre on how

- Data must be used and acknowledged.
- Researchers using third party data whose terms for reuse are governed by permissions given by Research participants must make sure that the reuse of the material is in line with the original consent given by the participants, before using this material with a GenAl tool.
- BSU's Research Librarians can help you to identify usage requirements from BSU's own repository systems.

Intellectual Property (IP) and Copyright

- In common with many emerging technologies, the Intellectual Property environment and legal implications around the use of AI, is developing. Caution and risk minimization are therefore encouraged.
- Ownership of BSU Intellectual Property is governed by our institutional Intellectual Property Policy
- There are Intellectual Property considerations when using GenAl because entering content into a GenAl tool, including Confidential or third party data, could be considered as publicly releasing that information.
- GenAl tools may retain the rights to use any content entered to train their model. Not only may developers of that tool have full access to entered content, but Al model outputs in the future may also include content that has been used to train the tool.
- Intellectual Property, including copyright, can only be used to train an AI
 model if there is consent from the rights holder or if an <u>exemption to copyright</u>
 applies.
- Intellectual Property, including copyright, can only be used to train an AI
 model if there is consent from the rights holder, if the licence or terms of use
 for the work permit this (e.g. a CC0 licence), if intellectual property rights have
 lapsed (e.g. for copyrighted works 70 years after the death of the creator), or if
 an exemption to copyright legislation applies
- However, due to the ongoing emergence of new GenAl tools there is no clearcut guidance on what counts as an exemption.
- For example, one of the exemptions to copyright law in the UK is that
 individuals are often allowed to use limited extracts of copyrighted material for
 non-commercial research or private study in line with usual academic
 standards (dependent on the amount copied, the effect of the copying on the
 market for the original work, and perhaps even the business model of the
 GenAl tool developer).
- However, if that copyright extract is entered into a GenAl tool, the company developing that tool may be getting commercial benefit from training the model with user content, such as charging a subscription fee to users.
- Therefore, the use of that copyrighted material, although for non-commercial Research, many factors decide on if this kind of use falls outside of "fair dealing" which is the legal term used to establish whether a use of copyright material is lawful or whether it infringes copyright.
- If you are not sure the content, text or image is under copyright <u>you must</u> <u>assume it is.</u>
- The user terms of service for each GenAl tool should outline what rights are

- granted to developers regarding any content entered into that tool, and Researchers should study this carefully to ensure they understand it.
- The BSU Library Team can advise on what is allowed by the licenses for all of our digital content, or help to decipher licensing terms for third party content if you are unsure.

Using third party Intellectual Property, including copyright licensed under Creative Commons

- Researchers should only enter third party data, including copyrighted material, into a GenAl tool when express permission is granted from the owner of that Intellectual Property, even if content is made available by licences such as Creative Commons.
- This should be in the form of auditable evidence, such as in an email or as part of a contract such as a licence. Failure to do so could result in infringement of third party Intellectual Property rights and leave BSU vulnerable to fees or lawsuits.
- Because GenAl tools do not currently provide any acknowledgement of the source Data, inputting third party Creative Commons licensed material would require the copyright owner's express permission to enter the Data into a GenAl tool.
- The only Creative Commons licence where express permission is not required is the CC0 licence where the copyright owner has waived their rights to the work.
- If you are not sure the content, text or image is under copyright you must assume it is.

Using BSU Intellectual Property in GenAl tools

- Wherever possible, Researchers should seek to avoid entering large quantities of Intellectual Property, including copyrighted material, generated from Research into GenAl tools. The principle of "as much as necessary, as little as possible" applies to all interactions with GenAl tools for research purposes.
- Determining what is and what isn't BSU Intellectual Property is governed via the institutional <u>IP Policy</u> – though this should be handled on a case-by-case basis and advice from the BSU Legal Services Team sought to clarify the status of intellectual property ownership.
- This is particularly important for any Intellectual Property that is unpublished, commercially sensitive, or potentially patentable.
- Some GenAl tools allow users to "opt out" of giving permission for content to be used to train the model. Wherever this is an option, Researchers should choose to opt out before entering any content into the tool.

What if my Research is patentable?

- All researchers developing potentially patentable IP should discuss this from the outset with the Research Support Office (<u>researchsupportoffice@bathspa.ac.uk</u>), who can help you to formalize the potentially patentable elements and engage with BSU Legal advice as required.
- BSU has an obligation to funders of Research, including UK Research and Innovation (UKRI), to file and maintain patents arising from Research where there is a commercial or beneficial reason to do so.
- One of the requirements of patentability is that the Innovation is novel and not made available in the public domain in any way prior to filing the patent.
 Therefore, entering patentable subject matter into a GenAl tool could inhibit future patent filings.
- If Researchers have or will be generating any Research that may contain
 patentable subject matter, they should not enter this content into a GenAl tool
 until advice has been sought from BSU's Research Support Office and Legal
 Services Teams.

Publishers and Third Parties using content

Following rapid developments in the GenAl space, publishers are often receiving content licensing requests from providers of GenAl tools. You may therefore be contacted by publishers of your work providing more information on their approaches, and to request your consent for your work to be included in the new licensing routes they are exploring.

This could include requests to put in place an addendum/amendment to your existing author or editor contract with them, and if you receive such a request, you should ensure that you feel you have been sufficiently informed of the implications of agreeing prior to providing your consent.

Publishers should articulate to you:

- Their clear principles around attribution
- Information relating to the formal licensing arrangements they hold with GenAl tool providers
- Information about the informed consent they are looking for to secure permission from you and any co-authors as a rightsholder
- Ideally, information about fair remuneration for author and publisher should you consent.

At a high-level, if your work is part of a GenAl tool licensing agreement, it could be used for:

 Training and testing the foundational models that are then used to create, for example, personal assistant and chatbot tools or discoverability summaries

- As part of banks of authoritative content that are used, on a perpetual basis, to check and verify the accuracy of information provided by GenAl tools
- Other use cases will emerge as technology evolves, and it is reasonable for you to expect your publisher to define and set limits on intended uses of content published by them whenever they set up new licensing relationships.

To set expectations, and to ensure the responsible use of the content your publisher publishes, it is reasonable to expect the publisher to articulate the following principles to you to ensure any consent you provide them with is informed:

- Any limits on the amount of text that can be reproduced
- Requirements that work is appropriately cited where applicable
- Information regarding any limits set on the ability to adapt or modify your work, or to create new works based on it
- Limits on sub-licensing of the work, and requirements that it is kept confidential and secure
- Procedures relating to the removal of content once a licensing term has ended

Financial renumeration for consenting for publishers to utilise your publications in this way is an emerging area and might vary from publisher to publisher – Cambridge University Press (CUP) has articulated their approach in their Author Erequently Asked Questions guidance, but this may vary between publishers and of course evolve in line with developments around the use of GenAl tools.

If a Researcher becomes aware of a third party who would like to use BSU-owned Intellectual Property in a GenAl tool or suspect a third party has entered BSU-owned Intellectual Property, whether Intellectual Property arising from Research or otherwise, without permission, the Researcher should contact the <u>Legal Services Team</u>

Third Party Consent

- Researchers working with third parties on Innovation activity should seek
 express permission from third parties before using any of their content in a
 GenAl tool. This consent must be informed e.g. they demonstrably know
 what they are giving you permission to do and this consent should be
 auditable.
- Researchers should only enter third party content, including copyrighted
 material, into a GenAl tool if there is consent from the rights holder, if the
 licence or terms of use for the work permit this (e.g. a CC0 licence), if
 intellectual property rights have lapsed (e.g. for copyrighted works 70 years
 after the death of the creator), or if an exemption to copyright legislation
 applies
- Researchers who are working to license BSU Intellectual Property to third
 parties should consider if they would be happy for this Intellectual Property to
 be used by that third party in a GenAl tool.
- If you are approached about licensing your IP to be processed through a

GenAl tool, you should:

- **a.)** enquire as to the nature and purpose of the processing, including which GenAl tool(s) are being used
- **b.)** ask for copies of relevant documentation for example privacy statement of the tool, nature of processing, data protection policies, a DPIA if appropriate, and
- **c.)** consult with the BSU Legal Services team if you are unsure before you agree.
- Any third party using BSU copyrighted material available under a Creative Commons licence needs express permission from BSU to use that material in a GenAl tool; failure to do so would result in the third party breaching the terms of the Creative Commons licence
- As with any Research activity, any use of GenAl must be declared and clearly explained to any third party involved to ensure that informed consent is achieved prior to the activity taking place

Reading List and Resources for Researchers

- We have compiled a reading list we recommend for researchers interested in the use of GenAl tools on the Integrity and Ethics Sharepoint Site: <u>Resources</u> on usage of Artificial Intelligence (AI) in research.docx
- Using Generative AI Tools in Research: Ethics Matters: https://ukrio.org/wp-content/uploads/2024-10-09-Summers_Gen-AI
 AI Ethics Considerations UKRIO Presentation-SMALLER.pdf
- UK Research Integrity Office Al in Research Resources: https://ukrio.org/ukrio-resources/ai-in-research/
- Responsible-ish GenAl dos and don'ts: text edition -https://www.careful.industries/blog/2025-4-responsible-ish-genai-dos-and-donts-text-edition

Appendix A - GenAl Use in Research Checklist

1. Understand GenAl

- Know what counts as GenAl (e.g., ChatGPT, Co-Pilot), or GenAl functionality within tools that have other non-GenAl functionality such as Nvivo).
- Clarify purpose (efficiency vs. ethics).
- Check relevant policy and funder guidance.

2. BSU's 5 Principles of Research Integrity

- Honesty, Rigour, Transparency, Care, Accountability.
- Disclose Al use; ensure data quality and responsibility.

3. Identify & Mitigate Risks

- Check for: sensitive data, bias, IP risks, "hallucinations", data quality
- Mitigate: DPIA, ethics approval, tool vetting, traditional research methods and processes for quality assurance
- Use ethical approval to articulate this once your chosen tool(s) have institutional approval

4. Ethical Scenarios

- Drafting? Analysis? Content generation?
- Ask: Need to disclose? Acceptable? Oversight? Approvals?

5. Plan Responsibly

- Outline: Purpose, Data, Approvals, BSU Research Integrity Guidance
- Get peer feedback before using Al.

6. Use Support

- BSU Artificial Intelligence Policy
- DPIA guidance
- UKRI rules
- Library (IP)

Final Tip

Could you explain this GenAl use to a journal editor or during a Viva?