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UNIVERSITY OF DAR ES SALAAM



GUIDELINES ON ETHICAL USE OF ARTIFICIAL INTELLIGENCE

February 2026

UNIVERSITY OF DAR ES SALAAM



GUIDELINES ON ETHICAL USE OF ARTIFICIAL INTELLIGENCE

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Name of Guidelines	Guidelines on the Use of Artificial Intelligence, 2026.
Description of Guidelines	The guidelines provide standards for the use of Artificial Intelligence at the University of Dar es Salaam.
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LIST OF ACRONYMS

AI	Artificial Intelligence
DICT	Directorate of Information and Communication Technology
DVC	Deputy Vice Chancellor
GAI	Generative Artificial Intelligence
IP	Intellectual Property
IT	Information Technology
LLM	Large Language Model
MoEST	Ministry of Education, Science and Technology
PI	Principal Investigator
PFA	Planning, Finance and Administration
UDSM	University of Dar es Salaam

1. INTRODUCTION

The University of Dar es Salaam (UDSM) embraces and advocates for the core values of ethical conduct and integrity in research, innovation, administration, teaching and learning, and consultancy. Adherence to these core values by the UDSM community (staff and students) promotes transparency and accountability, which are potential qualities for the University to achieve excellence locally, regionally, and internationally. UDSM manifests this achievement through her grand vision UDSM 2061 of *becoming a reputable world-class university that is responsive to national, regional and global development needs through engagement in dynamic knowledge creation and application*. Achieving this ambitious goal requires establishment and reinforcement of robust and effective policies and guidelines, including those that respond to the impact of emerging technologies, such as Artificial Intelligence (AI), on ethics and best practices of the University's primary functions and processes.

Recently, we have witnessed an increased use of Generative AI (GAI) and AI-assisted technologies in research, innovation, academics, and administration. GAI, a disruptive technology that mimics human intelligence in content generation, has completely revolutionized our traditional approaches of doing research, teaching, and administrative tasks. Researchers, including postgraduate students and their supervisors, apply GAI to refine research ideas, devise strategies for efficient literature review, and polish language, among other applications. Journal editors apply GAI to automatically assess and identify suitable manuscripts, based on the pre-defined standards and criteria, which can be sent out for peer review. Consultants and administrators leverage GAI capabilities to generate plausible reports for funders. In the midst of these promising applications, there has been several observed ethical and practical concerns on the use of GAI. Addressing these concerns is imperative to ensure quality, integrity, and transparency across all key functions and processes of an institution. Recognizing the adverse impacts of these concerns, UNESCO established *Guidance for GAI in Education and Research*¹. Additionally, in January 2025, the Ministry of Education, Science and Technology (MoEST) established the *National Guidelines for Artificial Intelligence in Education*. These guidelines ensure effective, ethical, secure and responsible use of AI tools within the Tanzania's education sector.

These national developments have prompted UDSM to institute specific guidelines for the UDSM community to responsibly use AI while ensuring effective knowledge creation and dissemination. The guidelines extend the scope of UDSM units, including the Offices of DVC–Research, DVC–Academic, and DVC–PFA, to address concerns emanating from exponentially growing use of AI by researchers, innovators, academicians, administrators, consultants, and students.

The UDSM *Artificial Intelligence Guidelines* (2025) aim to establish general principles that ensure proper use of AI in research, innovation, administration, teaching and learning, and consultancy. The guidelines are anchored on the *National Guidelines for Artificial Intelligence in Education* (2025), *National Digital Education Strategy* (2024/25 – 2029/30), *National Digital Education Guidelines* (2025), *Tanzania Digital Economy Framework* (2024-2034), *UDSM ICT Policy* (2022), and *UDSM Research Ethics Policy and Operational Procedures* (2010). They are also benchmarked from reputable research and academic institutions, publishers, journals, and indexing databases. The general objective remains to recognize the

¹ <https://www.unesco.org/en/articles/guidance-generative-ai-education-and-research>

impact of AI in academia, ensuring that this promising technology is ethically used to create, refine, and advance knowledge.

The UDSM AI Guidelines adhere to guiding principles of data protection because Generative AI necessitate uploading of data and information into AI tools to generate or modify content. These principles include *National Data Protection Act (2023)* and *UDSM Security Policy and Operational Procedures (2020)*.

2. RATIONALE

The establishment of UDSM guidelines on the ethical use of GAI in her Units (schools, colleges, and institutes) builds from the rapid integration of this emerging technology into teaching and learning, research and innovation, administration, and consultancy. Considering the potential impact of GAI, establishing the guiding principles on its use becomes paramount. If used without transparency, GAI tools can undermine the principles of honesty, originality, critical thinking, fairness, and intellectual autonomy that UDSM upholds (*National Guidelines for Artificial Intelligence in Education, 2024; National Digital Education Strategy, 2024/25 – 2029/30*).

In academic settings, GAI pose unique risks that demand careful management. Institutions must address these risks proactively through ethical guidelines to identify, evaluate, and minimize potential harms. GAI may, for instance, introduce bias and discrimination, where algorithms can reinforce inequities in areas such as admission processes, grading, student support services, or research applications (Cornell University, 2023).

These guidelines are also informed by critical concerns in privacy and data protection. Feeding sensitive student information, research data, or personal details into publicly accessible AI tools can lead to security breaches or unintended reuse by third parties. Over-reliance on AI by students or faculty risks undermining core competencies, such as writing proficiency, analytical thinking, and problem-solving abilities. Finally, the opaque nature of many AI systems hides the reasoning behind decisions in assessments or recommendations, which undermines trust and accountability (Cornell University, 2023; Flanagin *et al.*, 2024).

UDSM plays a vital role in building trust with key stakeholders, including employers and development partners, by providing clear insights into the application of GAI in credentialing and knowledge generation. Transparent and consistent guidelines help alleviate confusion, anxiety, and perceptions of unfairness, fostering confidence in ethical practices. Surveys reveal that stakeholders increasingly prioritize institutions with clear GAI guidelines. Furthermore, UDSM bears a societal duty to cultivate AI-literate graduates who grasp not only practical applications but also the technology's ethical dimensions, limitations, and broader societal effects. With expertise spanning wider academic fields (e.g., philosophy, law, computer science, engineering, and education), UDSM is ideally positioned to lead by example, promoting ethical reasoning and sparking critical discussions on GAI.

3. DEFINITION OF KEY TERMS

For the purpose of these guidelines, the following definitions of the key terms shall be adopted:

- 3.1 *Academic or technical or administrative Staff* shall refer to all personnel employed by the University primarily for teaching, research, and consultancy;
- 3.2 *Artificial Intelligence* shall refer to simulation of human intelligence in machines, encompassing learning, reasoning, problem solving, perception, and decision making;
- 3.3 *AI Tools* shall refer to software applications or platforms that utilize AI techniques to perform specific tasks or solve particular problems.
- 3.4 *Author* shall refer to any person who individually or jointly with others makes a design, a mark or copyrightable work and who meets the criteria for authorship under the Copyright and Neighbouring Rights Act of Tanzania.
- 3.5 *Editor* (such as journal editors, book editors, managing editors, or associate editors) shall refer to persons who are professionals responsible for overseeing the peer-review process by selecting appropriate reviewers, providing guidance to authors and reviewers, making decisions (e.g., accept, revise, or reject) on submissions, and publishing written content. They ensure quality and accuracy of the published content, adhering to publication standards.
- 3.6 *Ethical/Responsible Use of AI* shall refer to the use of AI tools in a manner that is trustworthy-that is, lawful (compliant with applicable laws and regulations), ethical (aligned with ethical principles and values), and robust (technically sound and mindful of its social context)².
- 3.7 *Generative Artificial Intelligence* shall refer to the type of AI that can produce different types of content, including text, images, audio, video, and synthetic data.
- 3.8 *Innovation* shall refer to conversion of ideas or inventions into products with economic value to meet market demands.
- 3.9 *Large Language Model* shall refer to a model that uses AI, specifically deep learning algorithms, for natural language processing tasks, including language generation, summarization of information, answering questions, and writing different types of creative contents.
- 3.10 *Privacy* shall refer to the aspect of controlling how personally identifiable information and data are collected, stored, and used in computing devices, such as computer, and the Internet.
- 3.11 *Publisher* shall refer to the approved entity of the University responsible for the entire publication process, including editorial management, peer review coordination, formatting, printing, online hosting, marketing, and distribution of research papers, journals, books, and other scholarly works in hardcopies (written), digital, or multimedia content.
- 3.12 *Reviewer* shall refer to a specialist in a relevant field who assesses submitted research manuscripts to determine their quality and appropriateness for publication in journals.
- 3.13 *Consultancy and public services* shall refer all internal and external consultancy, service jobs, and contracted works, such as laboratory testing against certain national and international standards/compliance, as defined by the *UDSM Consultancy Policy and Operational Procedures*.
- 3.14 *University* shall refer to the University of Dar es Salaam.

4. PURPOSE OF GUIDELINES

- 4.1 To establish a framework under which the University encourages and reinforces ethical and practical use of AI in academic publishing, academic and administrative tasks, research and innovation, and consultancy, and seeks to balance the exciting new possibilities offered by these tools with the awareness of their limitations;

² <https://digital-strategy.ec.europa.eu/en/library/ethics-guidelines-trustworthy-ai>

- 4.2 To provide guidance to Colleges, Schools, Departments, and employees of the University on matters of AI usage and the need for rigorous attention to accuracy, intellectual property, security, data protection and privacy of personally identifiable information, and ethical issues;
- 4.3 To ensure that a consistent approach is adopted by staff and students, and that all principles for the accountability of AI usage are taken into account and in compliance with relevant rules and regulations of the University.

5. SCOPE OF THE GUIDELINES

These guidelines shall apply to Generative AI and related technologies that can generate or modify content (e.g., text, audio, image, or video) and to the following groups:

- 5.1 All academic, administrative and technical staff employed by the University of Dar es Salaam, who, at any time of their employment, are required to engage in research, innovation, administration, teaching and learning, and consultancy within the University;
- 5.2 All UDSM academic staff on tenure track (permanent and pensionable) employment who hold leadership positions within the University and who have administrative and technical staff reporting. The guidelines shall also be applied to visiting scholars, researchers, and staff on contract (e.g., part-time staff), and occasional students who shall be engaged in research, innovation, administration, teaching and learning, and/or consultancy;
- 5.3 All academic and administrative units with their constituencies that house academic publishing outlets, such as journals;
- 5.4 All undergraduate and postgraduate students who are required to engage in research, innovation, and academics as part of the fulfilment of the award of their degrees.

ARTIFICIAL INTELLIGENCE USE IN RESEARCH, INNOVATION, AND CONSULTANCY

These guidelines instill trust and transparency among key participants that engage research, innovation, and consultancy outputs. They ensure that AI is deployed responsibly in academic writing, publishing, research funding, innovation, and consultancy or public services in a way that is fair, safe, and accountable. Concerned with potential threats and risks of AI, reputable publishers and leading research institutions have established policies and guidelines on the responsible use of AI. The goal remains to create and disseminate intelligible knowledge that aligns with globally established ethical principles. On this account, any use of AI in research (e.g., idea generation and exploration, coding assistance, interactive online search, and literature classification/drafting), innovation, and consultancy shall be declared (Appendix). The proportion of AI generated content, especially when the AI tool is used in writing, shall not exceed 30%.

6. Research

- 6.1 Researchers are encouraged to make themselves aware of the limitations of AI, and ensure that they are responsible for the integrity of the research and the output produced. It is the researcher's responsibility to counteract and avoid limitations of AI and AI-assisted tools, including generation of biased and inaccurate content. Researchers cannot offload responsibility for bias in their work on the AI system.
- 6.2 Researchers shall use AI or AI-assisted tools in the following ways to support data collection and generation:

- i. Collecting and organizing data;
 - ii. Generating data out of unstructured information;
 - iii. Summarizing data coming from various sources; and,
 - iv. Scaling up data collection with AI by conducting faster and less resource intensive experiments.
- 6.3 Researchers may use AI responsibly to triage, organize, summarize, and quickly get directionally oriented, in the context of an exponentially growing base of reported claims and established knowledge as they prepare research proposals;
- 6.4 Researchers shall not use AI or AI-assisted tools for generating and recording data, except for building the infrastructure for which data can be reproduced;
- 6.5 Researchers, including principal investigators (PIs) and supervisors of postgraduate students, shall provide leadership, guidance, and mentorship to early-career researchers of the University on the ethical use of AI; they shall communicate the standards and the norms in their specific fields, ensuring integrity and quality of the research;
- 6.6 Researchers are encouraged to first generate research hypotheses (or research questions) using their personal creative processes before seeking AI for ideation of the hypothesis, thereby preventing leakages into the public space and therefore damaging the reputation of both researcher and institution.

7. Innovation

- 7.1 Any use of AI in conceiving an invention, reducing it to practice, or generating copyrighted materials must be carefully documented and disclosed to all relevant parties involved in the publication. Within these disclosure and documentation requirements, AI may be used in a limited, transparent manner to support innovation activities, such as brainstorming, generating alternative approaches, and structuring or outlining complex ideas and content, provided that the human contributors remain responsible for the originality, accuracy, and final form of the work;
- 7.2 The University has limited ability to oversee how privately owned AI tools collect, retain, or reuse user-provided information—often for the provider’s commercial purposes and without compensating the original authors. Therefore, when research is likely to result in commercialization or revenue-generating publications, researchers should preferentially use AI tools whose training data and licensing terms are clearly compatible with public-domain or properly licensed content (and whose terms do not claim rights over user inputs or outputs). In all cases, before uploading any text, data, images, code, or other materials into an AI system, researchers and innovators must confirm that they have the legal and contractual rights to share that material (including third-party data, copyrighted content, and confidential or sponsored research materials), whether or not they expect financial benefit from the AI-assisted output;
- 7.3 Staff are encouraged to embed AI usage within a larger innovation strategy, i.e., *UDSM Guidelines for Commercialization of Intellectual Property, Innovations and Research Products*, that has demonstratable results;
- 7.4 UDSM shall promote the responsible use of AI tools by academics, research centers, research centers of excellence, and institutes/schools/colleges to improve the competitiveness of University innovations. UDSM shall use AI for trend scanning and evidence synthesis to identify emerging scientific and market developments, prioritize promising directions, and support early decisions on funding, partnerships, prototyping, and commercialization.

8. Consultancy and Public Services

- 8.1 UDSM Staff members shall ensure ethical use of AI in all activities related to consultancy or public services, which include marketing and branding of UDSM, to carry out consultancy, monitoring and evaluation of consultancy activities, capacity building to the members of UDSM and the public in general by declaring any content generated from AI, such as consultancy reports;
- 8.2 To ensure accountability in consultancy and public service work, UDSM staff shall appoint a designated owner for each AI system, define the owner's responsibilities, and document the system's intended use, limitations, and decision authority. The owner shall provide ongoing oversight by verifying outputs against agreed quality and ethical standards, keeping records of AI use and key decisions, monitoring for errors or bias, and promptly correcting, escalating, or discontinuing use when issues arise;
- 8.3 UDSM members engaging in consultancy activities shall ensure privacy and data security related to their clients at all the time while ensuring compliance to regulations, and address risks of data breaches, including AI generated data.

9. Authorship

- 9.1 Authors shall not use AI or AI-assisted tools to create or alter multimedia (e.g., enhancing, moving, removing, or introducing specific features), including images and videos, in submitted manuscripts, except when such tools are used as part of the research design or research method to generate or interpret the underlying research data;
- 9.2 Authors that use generative AI or AI-assisted tools in the writing process shall ensure that such tools are used only to improve readability and language of the content; authors shall be responsible and accountable for the originality, validity, accuracy, and integrity of their works, noting that AI can produce erroneous results and citations;
- 9.3 Authors may, subject to authorship, citation, and fact-checking considerations, use AI to ideate and iterate on the quality of a literature review. Examples include the following:
 - i. refining the review to include both prior research and its connection to the new research idea;
 - ii. rewriting the style of the literature review; and,
 - iii. refining the literature review to emphasize the contribution of the new research, along with its relevance to other gaps in literature, uncertainties, or even market sentiments.

However, authors should fact-check the literature and be aware of incomplete, biased, or even false AI outputs;

- 9.4 Researchers may use AI or AI-assisted tools for improving workflows and research processes, including constructing or critiquing survey questions or interview templates; Authors are encouraged to use well-documented AI resources for collecting and processing data;
- 9.5 Authors shall not list or cite AI and AI-assisted technologies as an author or co-author; in this context, authorship means a natural human entitled to carry out responsibilities and tasks related to the research, such as providing contractual assurance on the integrity of the research, consenting to UDSM Journal Policy and Guidelines through publishing agreements, taking accountability on the content, and drawing conclusions;

- 9.6 Authors must fulfil all core scholarly responsibilities and shall not submit manuscripts in which AI tools replace essential authors' work (e.g., study design, analysis/interpretation, conclusions, or ensuring accuracy and integrity);
- 9.7 Authors shall ensure adherence to AI software's specific usage policies, including proper attribution to content;
- 9.8 When using AI tools, authors shall comply with all relevant UDSM regulations on intellectual property, research ethics, and confidentiality, because AI tools may transmit or expose sensitive, proprietary, or confidential information to third parties and thereby breach institutional rules and confidentiality obligations;
- 9.9 Authors must be aware of the acceptable standards of using AI in different publication types (e.g., journal articles, books, talks, reports, reviews, research proposals, and conferences), and must check for the relevant policies and guidelines governing the usage.

10. Peer review

- 10.1 Reviewers shall treat manuscripts as confidential documents, and shall not upload the assigned unpublished manuscripts, either in whole or in part, into Generative AI tools and associated systems to avoid violation of authors' confidentiality and proprietary rights, breach of data protection rights, or exposure of authors' identifying information outside the peer review system;
- 10.2 Reviewers shall not upload their peer review reports, which may contain sensitive information of the manuscript, or authors' manuscripts and associated supporting files, into AI tools and associated systems, even if the use of such tools is restricted to language improvement for readability;
- 10.3 Reviewers shall not use Generative AI or AI-assisted technologies to assume their primary responsibility of critically reviewing and critiquing the research or scientific content as such technologies may generate inaccurate, biased, or incomplete conclusions;
- 10.4 Reviewers shall ensure integrity and accuracy of their peer review reports, and shall be responsible and accountable for the accuracy and views expressed in their reports;
- 10.5 Reviewers shall be compliant with regulations on intellectual property, ethical research, and confidentiality since AI may disclose sensitive information to a third party, which may be a violation of regulations and confidentiality.

11. Editorial and publication processes

- 11.1 Editors shall treat unpublished manuscripts as confidential documents and keep submission details confidential;
- 11.2 Editors shall not upload authors' decision letters into Generative AI tools, even for the reason of language improvement, to avoid possible exposure of authors' identifying information or manuscripts' confidential information;
- 11.3 Editors may use AI or AI-assisted technologies approved by the publisher for prescreening of the manuscripts to evaluate their originality or ethical use of AI;
- 11.4 Editors shall not use AI or AI-assisted technologies for decision-making of the manuscripts as critical thinking and original assessment of the manuscripts falls outside the scope of such technologies;
- 11.5 Editors shall be responsible and accountable for any editorial actions or processes, including final decisions communicated to the authors, related to their use of AI or AI-assisted technologies;

- 11.6 Editors shall be compliant with regulations on intellectual property, ethical research, and confidentiality since AI may disclose sensitive information to a third party, which may be a violation of regulations and confidentiality;
- 11.7 Editors shall ensure that authors and peer reviewers comply with these guidelines on the use of AI in academic publishing;
- 11.8 Publishers shall ensure that editors are provided with necessary tools, such as advanced AI detection software, to evaluate submissions before acceptance or before such submissions are sent out for peer review;
- 11.9 Editors shall, whenever possible and applicable, include in their reports any inappropriate use of AI or AI-assistive tools from the authors' manuscripts;
- 11.10 Publisher shall ensure that records of each submitted, reviewed, rejected, and published manuscript, including details of the responsible persons involved in any capacity, are securely stored while maintaining confidentiality at all stages;
- 11.11 Publisher shall ensure compliance of these guidelines, and shall take necessary actions, as stipulated in their relevant policies and guidelines, against manuscripts flagging unethical use of AI before the publication process begins;
- 11.12 Authors shall disclose to editors their use of AI and AI-assisted tools to facilitate research assessment, transparency, and reproducibility; any AI-generated content, including, but not limited to, text, figures, tables, images, and codes, shall be accompanied by a disclosure statement in the Acknowledgement section or a relevant part of the manuscript, and shall align with local and global policies and guidelines.

12. Research Funding and Compliance

- 12.1 The Principal Investigator (PI) shall be primarily responsible and accountable for the accuracy and integrity of information contained in the proposal or research reports submitted to the funder, including the University;
- 12.2 The PI shall discuss with collaborators the risks of entering research information into AI tools. Such information may be sensitive (e.g., unpublished technical details) or personal (e.g., current or pending funding). The PI remains responsible for the security of the research information, and any person intending to input information into an AI tool shall first obtain approval from the information owner (e.g., the PI);
- 12.3 The source of funds for AI in research shall depend on how the AI is being used in a particular study. However, where research grant proposal templates categorize software services as part of the budget, then it is plausible that the use of AI in the study may be acceptable.

ARTIFICIAL INTELLIGENCE USE IN EDUCATION AND PEDAGOGY

Educational settings vary significantly across the University of Dar es Salaam: from large lecture halls to seminars; from teaching and research labs, field, or studio avenues to clinical and practicum-based settings. AI has potential uses in almost all these settings. For example, lecturers can use AI and AI-assisted technologies to develop lecture outlines and materials, generate multiple versions of assignments, or compose practice problems. Students can use AI to research topics and study areas, iterate on text to improve written work, program, design and create code, art, and music, and many other uses. Depending on the use, however, AI could end up “doing the learning” that an assignment is designed to elicit, or distorting the value of assessments, depending on the student’s use of AI tools.

In order to address these risks and take advantage of the opportunities that AI offers, lecturers have re-assessed learning outcomes in the UDSM Curriculum Review of 2025. However, it is still crucial that lecturers re-assess their courses in light of the advent of AI. To do so, they

should consider the expectations of later courses that build on the knowledge and skills their courses are meant to develop in students; the expectations that future workplaces will have for employees' responsibility on the ethical use of AI tools; and the new opportunities for the purposeful use of AI tools to aid learning.

Noting the potential risks of AI in education and pedagogy, any use in academic writing shall be declared (Appendix). The threshold for AI generated content shall not exceed 30%. This declaration ensures that the reported work adheres the predefined ethical guidelines for using AI. The goal remains to disseminate knowledge while upholding academic integrity.

13. Academic Integrity and Accessibility

- 13.1 The use of AI technologies shall be integrated into teaching in ways that enhance learning objectives, and shall be accompanied by strategies to improve students' understanding and practice of academic integrity:
- i. Instructing students on the necessity of academic integrity, and what it constitutes;
 - ii. Guiding students towards scholarly and applied practices consistent with academic integrity;
 - iii. Clarifying intention of each learning outcome.
- 13.2 Academic staff shall be discouraged to use AI automatic detection algorithms for academic integrity violations, given their unreliability and current inability to provide definitive evidence of violations;
- 13.3 The University shall, from time to time, identify acceptable AI tools for checking academic integrity.

14. Specific Uses of AI in Disciplines

- 14.1 ***Writing Skills Courses:*** AI tools offer opportunities to help students develop their writing skills through assisting in planning, outlining, editing, and providing individualized feedback. However, use of AI for generating text and editing in the writing process raises major concerns about attribution of work, academic integrity, plagiarism, and failure to develop foundational and advanced writing skills and judgment. Guided use of AI is encouraged as the best approach to further, rather than to undermine, learning outcomes. AI can be used for the following purposes:
- i. Generate an outline for a written report that students practice revising;
 - ii. Summarize themes from a meeting transcript that students organize and prioritize;
 - iii. Brainstorm ideas that students then evaluate;
 - iv. Generate lists of sources that students validate and assess.
- 14.2 ***Creative Courses:*** Creative fields, such as art and music, have long engaged in discussions on what is "original work" and how technology can enhance creativity. Practitioners, including students, are highly motivated to develop their skills, but may also be eager to use new technologies to create. While there are many opportunities, concerns exist around ethical attribution of sources and copyright violations. There should, therefore, be ethical use of AI in creative courses so as to allow students time to develop their own design sense/creative perspective that comply with AI ethical standards. Instructors should include critical discussions of the sources of data that are used to build these tools in their pedagogy;
- 14.3 ***Social Sciences, Humanities, and Law Courses:*** In the social sciences, humanities, and laws, the advent of AI raises particular concerns for the written assignments,

individual/group assignments, presentations, lab sessions, project works, tests, quizzes, homeworks, papers, and exams that are a core component of student work in many courses. Passive reliance on AI by students to generate literature reviews or written work risks undermining the learning objectives of assignments, producing poor quality work, and violating academic integrity and standards. Instructors are encouraged to explore ways to responsibly incorporate AI into social science, humanities, and law courses in ways that enhance student learning. This can include having students evaluate AI output and explore ways to test its validity;

- 14.4 ***Mathematics, Physical Sciences, Computer Science, and Engineering:*** Technical and mathematical courses have adjusted well in the past to incorporate new technologies, such as computing and visualization tools. AI may provide similar opportunities to enhance education in the space of mathematics, computer science, physical sciences, and engineering. Some of the biggest concerns with current systems is their inaccuracy and circular reasoning. Instructors should make themselves aware of the capabilities of current systems and the fast-changing behavior of these systems on mathematical, scientific, and engineering problems. Students should be educated on the capabilities and limitations of these systems, prohibiting their use where basic skills need to be developed, and encouraging their use in cases that can improve student learning.

15. Course Content Creation

- 15.1 Academic staff should be explicit in identifying expectations regarding the use of AI tools in their courses, including individual assignments;
- 15.2 Academic staff are encouraged to identify well-defined learning outcomes to provide rationale on how and when AI can/cannot be used in their courses;
- 15.3 When AI is permitted, academic staff should be clear about student expectations in terms of documentation and attribution, what work is expected to be produced by the student themselves, and how the student is expected to validate or verify the output from AI;
- 15.4 Academic staff are encouraged to engage in ongoing conversations about the importance of academic integrity, including the fact that basic academic integrity principles remain important and still apply regardless of the existence of AI tools;
- 15.5 Integrating critique of current practices and uses of AI, including ethical issues, into all stages of teaching and learning is vital;
- 15.6 While academic staff may use AI as a tool for developing teaching materials, they are particularly encouraged to adhere to the same standards of attribution that they require of their students.

16. Course Assessment and Examination

- 16.1 Students should ensure ethical use of AI in open-book assignments (e.g., individual/group assignment, presentations, lab work, project work, and quiz);
- 16.2 The use of AI in closed-book assignments and examinations is prohibited;
- 16.3 The use of AI to generate reports or presentation materials from Practical Training/Teaching Practice and students' projects, including final-year projects, is prohibited;
- 16.4 Course instructors should ensure ethical use of AI in assessing students' works, including reports from lab works and reports from Practical Training/Teaching Practice.

17. Dissertations/Theses and Academic Papers

- 17.1 Any use of AI in the conception, production, analysis and/or writing of a dissertation/thesis should be carefully documented and disclosed to the Office of Director of Postgraduate Studies;
- 17.2 The use of AI in the conception, production, analysis and/or writing of journal paper, book, review report, reports, proposal and any related forms of academic writing should be carefully documented and disclosed to the Office of Director of Research and Publication;
- 17.3 Academic supervisors should ensure ethical use of AI in reviewing and assessing students' dissertations/theses and manuscripts.

ARTIFICIAL INTELLIGENCE USE IN ADMINISTRATION

AI use in administration is a strategic opportunity to elevate standards, reconsider policies and procedures, and meet the evolving needs of UDSM stakeholders. These guidelines have delved into the risks, use cases and benefits of AI within and between the university's administrative services, aiming at identifying means to support UDSM mission and vision effectively and efficiently. These guidelines on AI administrative use are informed by key principles that include ethical and safe use, data quality and control, human oversight, privacy and confidentiality, and alignment with audiences. The guidelines demonstrate key areas of AI administrative use and how the processes shall be guided i.e., risk of AI-enhanced cyber and related attacks, compliance oversight and accountability, service, information quality and accuracy, legal issues in AI use, and staff training and professional development.

18. AI Management

- 18.1 The deployment of AI within UDSM shall comply with national laws, regulations, guidelines and policies;
- 18.2 The University shall focus on the effects of AI on academic and administrative staff, students, and communities in learning, and should strive to help improve the services of all UDSM community members through responsible and effective use of AI in academics and administrative works;
- 18.3 The University shall take proactive measures to prevent risks and negative impacts of AI on intended users and the institution;
- 18.4 A privacy impact assessment shall be carried out where AI systems use or analyze personal data, including sensitive and private information of staff and students of the University. Staff and students are encouraged to protect personal data through focused data collection and respecting user permissions;
- 18.5 Administrative staff shall ensure that relevant data is used and collected through legal and ethical means, and that the data provenance is documented and managed;
- 18.6 DICT shall ensure that all ICT systems of the University undergo regular testing and risk mitigation to demonstrate their safety and effectiveness for intended use, and that information and data of the University are not retrieved by AI systems or found in public domains;
- 18.7 The UDSM Quality Assurance Bureau shall any integration of AI into research, teaching and learning, consultancy, or administration is monitored, evaluated, and reported;
- 18.8 The UDSM Center for Continuing Education shall ensure regular capacity building programmes on AI across all Units of the University;

- 18.9 The University shall ensure that there is meaningful human oversight and clear lines of authority over AI system deployment, use, and impacts, and shall ensure that AI governance processes are documented, maintained, reviewed, and updated to ensure accountability;
- 18.10 The University shall ensure that there are additional safeguards and that contingency processes are in place to handle failures or incidents with high-risk systems;
- 18.11 The university shall ensure that systems are deployed in consultation with diverse stakeholders to identify risks, and that clear and adequate information should be provided to users regarding AI system capabilities and limitations.

19. Risks of AI-Enhanced Cyber and Related Attacks

- 19.1 The University shall remain vigilant, implementing good contract oversight and robust security measures and fostering a culture of cybersecurity awareness to safeguard against any evolving risks associated with external AI utilization;
- 19.2 The University shall ensure that training and awareness campaigns for staff as well as students remain a critical component of mitigating external threat risks.

20. Compliance Oversight and Accountability

- 20.1 The University shall ensure that Colleges, Schools, Institutes, major departments and Directorates across the institution are tasked with compliance, privacy, policy, and governance to address reputational, financial, regulatory, and compliance needs in the AI space.

21. Service, Information Quality and Accuracy

- 21.1 The University shall ensure that appropriate staffing and training, with a focus on auditing and evaluating the training data and output of the AI tools, are provided to staff and students;
- 21.2 DICT shall ensure a mandatory, documented testing, and quality assurance plan per AI solution is recommended as part of IT governance. A mechanism for users to report concerns and allow for analysis by units running the tools is critical;
- 21.3 Users shall be advised that, despite compelling and authoritative presentations, AI outputs must be validated.

22. Legal Issues in AI Use

- 22.1 Staff and students shall be warned that hasty or disordered deployment of AI for administrative purposes could lead to consequences, such as bias in decision-making, plagiarism, and violation of privacy laws.

23. Staff Training and Professional Development

- 23.1 The University shall ensure that staff have the appropriate training and skills to effectively use AI tools within administrative contexts;
- 23.2 The University leadership and management shall enforce human oversight and expertise to guide and optimize AI-driven processes.

24. Amendment and Revision of the Guidelines

- 24.1 The Office of DVC-Research shall monitor and evaluate the effectiveness of these guidelines;
- 24.2 These guidelines shall be reviewed after every three years from its approval;
- 24.3 Where implementation challenges have been identified, the University shall revise the clauses accordingly and make necessary amendments.

25. Financial Implications

Implementing these guidelines has financial implications. Therefore, **units shall** allocate a dedicated budget to ensure effective implementation. The budget items include the following:

- Professional training **to the staff members** under relevant **units** on the ethical use of AI in research, teaching, consultancy, administration;
- AI tools (software) **for editors**, researchers, educators, and administrators; these AI tools may be procured, obtained through subscription, or developed internally by the UDSM Units;
- Publication and distribution of the guidelines across **departments and sections under UDSM Units**.

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APPENDIX

DECLARATION FOR USE OF AI IN SCIENTIFIC WRITING

(Note: AI threshold should be less than 30%)

1. Primary Contact Details

Name	
Title	
College/School/Institute	
Department (If Applicable)	
Email	

2. Declaration of Use of Artificial Intelligence in (Tick appropriate):

- | | |
|--|---------------------------------------|
| <input type="checkbox"/> Research project proposal | <input type="checkbox"/> Dissertation |
| <input type="checkbox"/> Grant funding proposal | <input type="checkbox"/> Book chapter |
| <input type="checkbox"/> Journal Article | <input type="checkbox"/> Report |
| <input type="checkbox"/> No use of Artificial Intelligence | <input type="checkbox"/> Other: |

3. List of AI tools/systems used (indicate links, model/tool name, and manufacturer)

4. Specific use of the AI tools/systems in your work

5. Systematic steps on how the AI tool was used

6. How have you used and/changed the generated AI output?

7. What is the proportion (%) of AI content?

Date:

Signature: