ARTIFICIAL INTELLIGENCE POLICY

NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

JULY 2025

Artificial Intelligence Policy

Policy Approval

#	DESIGNATION	NAME	AUTHORISED BY	SIGNATURE	DATE
1	**Reviewed by:**	ICT Senate Committee	ICT Senate Chairperson		
2	**Approved by:**	Senate	Senate Chairperson		
3	**Ratified by:**	University Council	Council Chairperson		

1. Purpose & scope

The National University of Science and Technology (NUST) embraces Artificial Intelligence (AI) as a transformative tool to advance its mission: to be a world class University in science, technology, innovation, entrepreneurship and business development, spearheading industrialisation locally and beyond. This policy governs AI's responsible use across academic, research, innovation and administrative functions, ensuring alignment with core institutional values of integrity, equity, and innovation. By integrating AI thoughtfully, NUST empowers its stakeholders and community to harness cutting-edge AI technology while upholding the highest standards of academic excellence.

As AI technologies like large language models reshape education, NUST recognises their dual potential to enhance learning outcomes while posing ethical challenges to academic rigour. This policy framework establishes guardrails for proper AI utilisation in teaching, student work, and research, protecting assessment validity through clear guidelines on appropriate use. It mandates transparency in AI-assisted outputs and addresses bias mitigation in algorithmic systems. The policy extends to all university stakeholders - students, lecturers, researchers, administrators and partners. It creates standards for the development and deployment of AI solutions that serve NUST's industrialisation and community service mandates. By integrating AI governance with Zimbabwe's Education 5.0 framework and the country’s national development strategy and blueprint, NUST positions itself at the forefront of digital transformation while maintaining human oversight.

NUST is committed to the continuous review of its policies and curricula to ensure responsiveness to technological advancements while upholding rigorous ethical standards. To cultivate local expertise, the university will strategically integrate AI, machine learning, and data science into relevant academic programs. These efforts will be reinforced through regular workshops and capacity-building initiatives designed to elevate AI literacy university-wide. This balanced approach enables NUST to harness AI's transformative potential for STEM education and socio-economic development while safeguarding academic integrity and fostering inclusive technological advancement. This AI policy establishes guidelines for the ethical and secure use of AI tools, including generative AI, learning and tutoring aids, research and data analysis systems, administrative and operational automation, productivity and accessibility tools, exam proctoring and assessment systems, and emerging technologies.

Definition of terms

Artificial Intelligence (AI)

The development of systems which include machine learning, natural language processing, and robotics capable of performing tasks that ordinarily require human intelligence, which include learning, reasoning, problem-solving, and decision-making.

Generative AI

AI systems such as ChatGPT, DALL-E and others that create text, images, code, or multimedia in response to prompts, often trained on large datasets.

Cyber and Data Protection Act

The Zimbabwean law which regulates the processing of personal information to protect the privacy of individuals' data collected and processed online and offline.

Algorithmic Bias

Systematic errors or unfairness in AI outputs due to flawed training data or design, which may disproportionately affect marginalised groups.

Data Privacy

The protection of personal and sensitive information collected, processed, or stored by AI systems, in compliance with national laws e.g., cyber and data protection act.

AI Ethics

The principles that govern the responsible development, deployment and use of AI, including fairness, transparency, accountability, and respect for human rights.

Plagiarism (in AI Context)

The use of AI-generated content without proper attribution or in violation of academic integrity policies.

Sustainable AI

The development and deployment practices that consider environmental impacts and long-term societal benefits of AI.

Digital Literacy (AI-Specific)

The ability to critically evaluate, use, and engage with AI technologies responsibly.

Human Oversight

The use of a qualified human to review, validate, or approve AI systems before final implementation.

Objectives of the Policy

The objectives of the policy are to:

1.1 Uphold ethical and transparent AI use

- Ensure AI tools align with institutional values, national laws (e.g., Cyber and Data Protection Act (CDPA)), and global standards.
- Ensure mandatory transparency in AI-assisted decisions (e.g., grading, admissions, screening curriculum vitaes) and prohibit unethical practices like misinformation or biased algorithms.

1.2 Protect academic integrity

- Prevent AI misuse (e.g., plagiarism, ghostwriting) in assessments and research through detection tools.
- Clarify permissible vs. prohibited AI uses in learning, assessments, and research outputs.

1.3 Guide responsible AI adoption

- Provide students and staff with training, citation guidelines, and discipline-specific protocols for AI-generated content. Training will be delivered through academic departments, library support, and workshops to ensure compliance with academic integrity standards as guided by the Senate.
- Empower students and staff to understand AI limitations, biases, and ethical boundaries.

1.4 Advance innovation, research and industrialisation

- Foster AI-driven STEM research, entrepreneurship, and industrialisation in line with Education 5.0 and the national development strategy or blueprint.
- Encourage ethical AI applications to solve local, national and global challenges.

1.5 Ensure Data security and privacy

- Comply with Zimbabwean and international data laws to protect sensitive university/student data in AI systems.
- Prevent unauthorised data use in AI training or decision-making.

1.6 Promote equity and accountability

- Guarantee equitable access to AI tools across disciplines and demographics.
- Audit AI systems regularly for fairness, non-bias, and compliance.

1.7 Fostering AI literacy

- Advance AI awareness and understanding across campus, empowering students, and staff to harness its potential

2. Ethical principles

2.1 Transparency

NUST mandates full disclosure of AI tools used in academic and administrative processes to foster technological innovation, empower entrepreneurship, and drive industrialisation through research and strategic partnerships—ensuring sustainable growth and upholding academic integrity. All academic staff shall explicitly state in course outlines or at the beginning of the semester whether generative AI (e.g., ChatGPT) and other AI models will be permitted for assignments and any academic work in accordance with Section 3 of this policy. Administrative units deploying AI for decision-making (e.g., admissions, human resources, or for ICT-based systems) must publicly declare its role, scope, and limitations to the NUST public.

2.2 Fairness & bias mitigation

AI systems employed by NUST shall undergo regular audits to identify and mitigate biases related to sensitive data such as language, gender, opinions or socioeconomic status. The University prioritises human oversight and intervention for high-stakes decisions and will collaborate with local developers to ensure tools are calibrated to Zimbabwean contexts.

2.3 Accountability

Users remain solely responsible for AI-generated outputs and:

- Students must label and cite AI assistance in submissions; undisclosed use constitutes academic fraud and misconduct.
- The Senate will approve guidelines for citing AI use in line with the General Regulations.
- Staff and researchers must verify AI outputs before dissemination or action.
- Administrators must document human review of AI-informed decisions.

2.4 Privacy & data security

NUST adheres to Zimbabwe's CDPA and other international standards by:

- Obtaining explicit consent for data collection.
- Preferring locally hosted AI solutions to ensure data sovereignty.
- Conducting third-party vendor audits to enforce compliance.

3. Academic integrity & AI use

This section emphasises safeguarding academic integrity by preventing AI misuse in assessments, research, and administrative tasks, while clarifying acceptable and prohibited uses to promote ethical practices across all academic activities.

3.1 Mitigating AI-Generated Content in Assessments

It is increasingly challenging to detect AI-generated content with complete accuracy. To uphold academic integrity, lecturers and supervisors must actively engage in all formative stages of student assessments, including drafts, proposals, and iterative feedback sessions for coursework and dissertations. While detection tools can aid the process, human oversight remains critical. Institutions should provide training to staff on recognising AI-assisted work and emphasise pedagogy that reduces reliance on generative AI.

Close involvement allows educators to:

I. **Monitor development** – Track logical consistency, writing style, and depth of analysis over time.
II. **Identify anomalies** – Spot discrepancies between a student's demonstrated knowledge and submitted work.
III. **Foster accountability** – Encourage transparency through regular check-ins and viva voce (oral) assessments.

3.2 Academic staff discretion

Lecturers and instructors retain the authority to:

I. Define course-specific AI statements, guidelines and use cases (e.g., allowing/restricting AI tools for certain assignments).
II. Require explicit declarations of AI use (e.g., via cover letter).

III. Design assessments that mitigate AI misuse (e.g., project based learning, in-class test/work, viva voce defenses etc).

IV. **Learning and research assistance**:

A. Brainstorming ideas, refining research questions, or debugging code (e.g., ChatGPT, GitHub, DeepSeek, Copilot and others).

B. Summarising or paraphrasing content with proper verification and citation.

C. For postgraduate students, the percentage of text likely generated by AI and text that is likely AI-paraphrased must not exceed 20% or as determined by the Senate.

D. For undergraduate students, the percentage of text likely generated by AI and text that is likely AI-paraphrased must not exceed 40% or as determined by the Senate.

E. Lecturers may provide additional guidance on AI generated text in line with Senate guidelines.

V. **Tiers of permissible AI use and disclosure requirements**

A. Basic AI use: proofreading & language support
Students may use AI tools for grammar correction, syntax improvement, and general language refinement without formal disclosure requirements, though the University encourages acknowledging such assistance when substantive.

B. Intermediate AI use: Content generation & writing assistance
AI may be used for substantive intellectual contributions, such as generating summaries, drafting literature reviews, or composing sections of written work. In such cases, the University requires students and stakeholders to explicitly disclose AI assistance.

C. Advanced AI use: research, methodological and analytical guidance
When AI tools are employed to guide research design, data analysis, or methodological decision-making, students and stakeholders must transparently disclose their use to maintain academic integrity.

VI. **Administrative efficiency**:

A. Automating routine tasks (e.g., grammar checks, data organisation).

VII. **Creative exploration**:

A. Experimenting with AI-generated drafts or designs, provided final work reflects original thought.

Condition: All AI-generated content must be explicitly cited according to discipline-specific standards (e.g., APA, IEEE, Chicago) and as guided by the Senate.

3.3 Prohibited uses

To uphold academic integrity, NUST strictly prohibits:

I. Plagiarism: Submitting AI-generated work (text, code, designs) as one's own without attribution.
II. Cheating: Using AI during graded assignments or examinations unless explicitly permitted by the lecturer or by examination regulations.
III. Fraudulent misrepresentation: Fabricating data, sources, or analysis using AI tools.
IV. Bypassing learning: Over-reliance on AI to complete core tasks (e.g., outsourcing critical thinking or problem-solving).

4. Research and AI development

NUST emphasises human oversight in AI research and development, ensuring accountability through rigorous validation of outputs, ethical decision-making, and strict compliance with Institutional Review Board standards for studies involving human subjects.

4.1 Human oversight and accountability

NUST mandates that human oversight is maintained in all AI-driven research projects. Principal investigators are ultimately responsible for:

- Vetting and validating AI-generated outputs (e.g., data, conclusions) before dissemination
- Ensuring AI tools do not automate decisions that require ethical judgment (e.g., clinical diagnoses, social science evaluations, student admission etc)
- Documenting human review processes in research methodologies.

4.2 Institutional Review Board (IRB) compliance

AI research involving human subjects or sensitive data must:

- Obtain prior approval from NUST's Institutional Review Board.
- Explicitly disclose AI's role in data collection/analysis in consent forms.
- Implement additional safeguards when AI processes personal identifiable data (e.g., biometrics, interviews).

5. Administrative & operational use

NUST allows the use of AI-driven automation in administrative tasks, but establishes strict guidelines for automated decision systems in admissions, hiring, grading, and campus security, ensuring human oversight, ethical practices, and protection of student and staff rights while utilising AI technologies.

5.1 Automated decision systems

5.1.1 Admissions & student records

- AI tools may pre-screen applications but cannot:
    - Automatically reject candidates without human review.
    - Use non-academic profiling (e.g., social media scraping), except where this is done to aid human reviews.
- Final admission decisions require human reviewers.

5.1.2 University grading systems

- Automated grading permitted only for:
    - Objective assessments (multiple-choice question, math problems)
    - Automated tools may provide initial feedback on assignments (e.g., grammar checks, formatting suggestions, or basic rubric-based evaluations). However, the final assessment and any substantive feedback must be reviewed, adjusted, and approved by the lecturer to ensure accuracy, fairness, and alignment with learning objectives.
- Students may request human re-evaluation of AI-graded work.

5.1.3 Hiring & promotions

- NUST may use AI for curriculum vitae screening and other human resources related functions, but must:
    - Exclude sensitive data (as per the CDPA Section 11 and 12) such as genetic data, gender, age, religion.
    - Provide written justification for filtered candidates.
- Interview scoring using AI requires prior approval

5.2 Campus security & surveillance

NUST's rights-based approach to surveillance ensures that security measures enhance safety without compromising individual freedoms. By prioritising privacy, accountability, and ethical governance, the university sets a benchmark for responsible security practices in academic spaces.

Facial recognition ban

- Prohibited in:
    - Arbitrary facial recognition for the purpose of tracking individuals.
    - Surveillance in private spaces (e.g., student residences, restrooms and canteens).
    - Monitoring for non-security purposes (e.g., tracking attendance, profiling).
- Limited exceptions require the Vice-Chancellor's approval such as:
    - High-security labs (with opt-out alternatives)
    - Criminal investigations (court order required)

Predictive analytics restrictions

- No AI systems may:
    - Profile students as "potential offenders"
- Permitted uses:

- Anomaly detection in network security.
- Security enhancements.
- Crowd management during events (non-identifying analytics).

6. Data privacy & security

NUST prohibits the input of sensitive data into public AI tools and mandates the use of approved enterprise solutions. Third-party vendors must comply with stringent data protection and security protocols.

6.1 Prohibited data practices

All NUST stakeholders shall:

- Never input sensitive personal data as defined by the CDPA (Section 11 and 12) into AI systems.
- Never input the following into public AI tools (e.g., ChatGPT, Gemini):
  - Student records (grades, IDs, disabilities)
  - Employee HR data
  - Unpublished research data
  - Proprietary institutional information
  - Protected health information
- Use only approved enterprise AI tools which align with NUST's data processing agreements such as Copilot.

6.2 Vendor compliance framework

Third-party AI providers must:

- Agree and sign NUST's data processing agreements confirming:
  - Local hosting of Zimbabwean data (as per the CDPA Section 8)
  - End-to-end encryption for all data transfers
  - Immediate breach notification within 24 hours
- Undergo annual security audits by the DPO/ICT Directorate

7. Environmental sustainability

NUST recognises the significant environmental impact of AI systems and commits to promoting sustainable practices throughout their lifecycle, from development to deployment. This includes rigorously assessing energy consumption and carbon emissions, particularly in large-scale AI models, while advocating for optimised algorithms, energy-efficient computing, and renewable energy-powered infrastructure. Additionally, NUST will prioritise responsible hardware practices, such as reducing e-waste, extending device lifespans, and supporting sustainable procurement and recycling programs. To embed these principles institutionally, the

university will integrate sustainability into AI research, education, and policy, fostering interdisciplinary collaboration. By balancing innovation with ecological responsibility, the institution aims to lead in advancing ethical and sustainable AI technologies.

To minimise environmental harm, the policy encourages:

- Adoption of energy-efficient AI models and computing practices.
- Optimisation of algorithms to reduce computational demands.
- Responsible procurement, recycling, and disposal of hardware to mitigate e-waste.
- Regular environmental impact assessments of AI projects.

8. Enforcement & violations

NUST will implement enforcement measures for AI-related violations, offering detection resources and reporting channels. With disciplinary actions taken against offenders in line with its general academic regulations (https://www.nust.ac.zw/index.php/students/academic-regulations.html) and as contained in its student handbook. Some of the notable violations include:

- Academic misconduct: Unauthorised use of AI tools (e.g., ChatGPT) for assignments, exams, or plagiarism.
- Ethical concerns: AI misuse in research, data privacy breaches, or biased algorithms.
- Cybersecurity issues: AI-based hacking, deepfakes, or unauthorised data scraping.

8.1 Detection resources

NUST provides institutional access to:

- AI detection resources such as Turnitin and others depending on available licences.

8.2 Reporting channels

Suspected violations may be reported through the:

I. Lecturer/Departmental Chairperson (for coursework-related misuse)
II. DPO/ICT Security/Helpdesk (for data breaches/unauthorised AI access)
III. Supervisor/Departmental Chairperson (for research misconduct)

8.3 Disciplinary actions

Academic violations (e.g., undisclosed AI use) shall follow the NUST's academic general academic regulations as guided by Senate and may include:

- First offence: Assignment rewrite

- Second offence: Course failure
- Third offence: Suspension (1 semester minimum)

9. Policy review & updates

NUST will regularly review and update its AI policies, ensuring stakeholder participation and transparency. The process includes diverse input, public access to policies, and the provision of resources in local languages to maintain clarity and inclusivity.

9.1 Scheduled revisions

NUST will conduct formal AI policy reviews and updates through:

- Full reassessment annually
- Interim amendments for breakthrough technologies (e.g., new generative AI tools)
- Trigger-based revisions will be mandatory when:
    - New data protection laws are enacted or revised
    - Major AI incidents occur (e.g., detection tool failures)
    - Curriculum changes that require AI integration (per Senate approval)

9.2 Stakeholder participation process

A. The Standing AI Policy Committee shall be appointed with the approval of the Senate.

- Composition: Four lecturers, two student representative, Deputy Registrar RAA, ICT Director, Legal Director, Academic Dean, Data Protection Officer
- The committee's responsibilities include:
    - Drafting and updating AI usage policies for students, lecturers, and researchers.
    - Regularly revising AI policies to keep up with technological advancements.
    - Assessing risks of AI tools (e.g., generative AI, facial recognition and other tools).
    - Monitoring AI applications to prevent bias, discrimination, or privacy violations.
    - Organising workshops & seminars on responsible AI use for students and lecturers.

B. Consultation Channels

1. Academic staff: Departmental meetings and teaching surveys
2. Students: SRC-led focus groups
3. Technical teams: Sandbox testing of new AI tools
4. External partners: Input from POTRAZ, Ministry of ICT & Courier Services, and industry collaborators

9.3 Change implementation protocol

1. The draft should be circulated to the NUST public for a reasonable time
2. Regulatory review to be vetted against:
    - Zimbabwe's CDPA amendments

9.4 Transparency mechanisms

- Publish AI policy on intranet and NUST website
- AI policy will be explained in local languages such as Ndebele, Shona and other local languages and using audiovisual tools to enhance understanding.
- Pre-semester policy summary emails to alert students.

10. Conclusion

This living document will evolve through regular reviews, ensuring that NUST remains at the forefront of ethical AI adoption in Zimbabwean and African higher education. The entire university community shares the responsibility to uphold these standards, fostering a culture where technology serves humanity's highest aspirations.

Approved by: NUST Council
Effective Date: [Insert Date]
Next Review Cycle: August 2026

Benchmarked with AI policies from

University of Johannesburg: https://ujonlinepress.uj.ac.za/index.php/ujp/AI
University of KwaZulu Natal:
https://law.ukzn.ac.za/guide-for-using-generative-ai-in-research/
Harvard University:
https://provost.harvard.edu/guidelines-using-chatgpt-and-other-generative-ai-tools-harvard
Rhodes University:
https://www.ru.ac.za/media/rhodesuniversity/content/jms/documents/documents2024/Student_Guidelines_for_the_Use_of_Chat_GPT_and_other_Generative_Artificial_Intelligence_tools_and_services.pdf
University of Sydney:
https://www.sydney.edu.au/students/academic-integrity/artificial-intelligence.html